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**The Institute "Graduate School of Management»**  
**Master in Management Program**

System of Factors in Consumer Choice of Organic Products

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## ЗАЯВЛЕНИЕ О САМОСТОЯТЕЛЬНОМ ХАРАКТЕРЕ ВЫПОЛНЕНИЯ ВЫПУСКНОЙ КВАЛИФИКАЦИОННОЙ РАБОТЫ

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## Аннотация

Автор	Айвазян Мэри Гайковна
Научный руководитель	Смирнова Мария Михайловна
Название ВКР	Система факторов выбора потребителями органических продуктов
Описание цели, задач и основных результатов работы	<p><b>Цель исследования</b> – сформулировать систему факторов, влияющих на потребительские предпочтения в отношении выбора органических продуктов на российском рынке.</p> <p>Для достижения поставленной цели необходимо решить следующие <b>задачи</b>:</p> <ol style="list-style-type: none"><li>1. Определить ключевые факторы потребительского поведения на рынке органических продуктов, в том числе под влиянием пандемии.</li><li>2. Изучить и систематизировать ключевые аспекты маркетингового продвижения органических продуктов и их влияние на потребительское поведение.</li><li>3. Обеспечить статистическую поддержку гипотез о росте органического рынка и возросшем спросе на эти продукты и разработать дизайн исследования для дальнейшей интерпретации предпочтений и факторов выбора органических продуктов потребителями.</li><li>4. Провести комплексное исследование: качественное исследование с помощью серии из 3 фокус-групп и количественное исследование с помощью онлайн-опроса (выборка не менее 300 человек).</li><li>5. Провести дополнительное исследование потребительских предпочтений и создать кластеры для персонализации рекомендаций по продвижению.</li></ol> <p><b>В результате</b> исследования разработана система факторов, которая в дальнейшем была применена для 4 групп потребителей (кластеров) на российском рынке, а также даны рекомендации, ориентированные на особенности каналов коммуникации каждого кластера, применимые для разработки политики коммуникации производителей органической продукции в России.</p>
Ключевые слова	Органические продукты питания, потребительское поведение, влияющие факторы, потребительский выбор, решение о покупке, маркетинг, Covid-19.

## Abstract

Master Student's Name	Meri Gaikovna Aivazian
Academic Advisor's Name	Maria M. Smirnova
Master Thesis Title	System of factors in Consumer choice of organic products
Description of the goal, tasks and main results	<p><b>The goal</b> of the study is to develop the system of factors influencing consumer preferences regarding the choice of organic products on the Russian market.</p> <p>To achieve this goal, it is necessary to solve the following <b>objectives</b>:</p> <ol style="list-style-type: none"><li>1. To identify the key factors of consumer behavior in the market of organic products including identifying changes under the influence of the pandemic.</li><li>2. To study and systematize the key aspects of marketing promotion of organic products and their impact on consumer behavior.</li><li>3. To provide statistical support for hypotheses about the growth of the organic market and the increased demand for these products and to develop a research design for further interpretation of preferences and factors of choosing organic products by consumers.</li><li>4. To conduct mix research: qualitative research through a series of 3 focus groups and quantitative study through an online survey (at least 300-person sample).</li><li>5. To conduct additional research of consumer preferences and to create clusters to personalize promotion recommendations.</li></ol> <p><b>The result</b> of the thesis was developed a system of factors, which was applied into 4 groups of consumers (clusters) on the Russian market. There were also given recommendations, focused on the specifics of communication channels of each cluster, applicable to the development of a communication policy for organic manufacturers in Russia.</p>
Keywords	Organic food, consumer behavior, influencing factors, consumer choice, purchase decisions, marketing, health, Covid-19.

## **Introduction**

Nowadays, people are more thinking about the quality of the consuming products. Organic products serve as an excellent opportunity to meet people needs. The interest in the issue of organics is emphasized by the number of studies conducted recently, which falls on Covid-19. The number of publications in Scopus on the keyword "organic product" is increasing every year. We can observe a stable number of publications for 2020 and 2021 (288 and 287, respectively). Similar indicators are available for the query "organic food". The peak falls in 2021 and amounts to 396 publications.

At the same time, the greatest interest in organic products is observed in almost equal shares in chemistry (15.8%) and agriculture (15.2%), and slightly less from the point of view of environmental science (9.8%).

The main question is how consumer behavior changes during such situational factors as Covid-19. That's why, we set the goal studying consumer preferences in the field of organic products to determine the system of influencing factors.

### **The object:**

Consumer preferences regarding the choice of organic products on the Russian market.

### **The subject:**

The structure of preferences and factors of choosing organic products.

**The goal** of the study is to develop the system of factors influencing consumer preferences regarding the choice of organic products on the Russian market

To achieve this goal, it is necessary to solve the following **objectives**:

1. To identify the key factors of consumer behavior in the market of organic products including identifying changes under the influence of the pandemic.
2. To study and systematize the key aspects of marketing promotion of organic products and their impact on consumer behavior.
3. To provide statistical support for hypotheses about the growth of the organic market and the increased demand for these products and to develop a research design for further interpretation of preferences and factors of choosing organic products by consumers.
4. To conduct mix research: qualitative research through a series of 3 focus groups and quantitative study through an online survey (at least 300-person sample).
5. To conduct additional research of consumer preferences and to create clusters to personalize promotion recommendations.

The first chapter presents a study of the scientific literature in the field of organic products in order to identify the factors that influence the choice of organic products. The study of the first

chapter is aimed at identifying and systematizing the factors of choosing organic products, and it underlies the analysis of Chapter 2.

The second chapter contains the results of a focus group and a survey of respondents, presents the results of qualitative and quantitative research, conclusions, and answers to questions about the factors of choice. Moreover, chapter contains a cluster analysis based on the responses of respondents. It is also the basis for recommendations.

## **CHAPTER 1. CONSUMER DECISION MAKING WITH REGARD TO ORGANIC PRODUCTS**

### **1.1 Factors affecting organic products purchase decisions**

The purpose of this paragraph is to identify the key factors of consumer behavior in the market for organic products. The logic of the paragraph is as follows: we have reviewed various studies of the factors of consumer choice of organic products, systematized the results obtained, as a result, we have formulated a system of factors that influence the consumer's decision in various degrees.

It is important to consider the behavior of consumers of organic products in the framework of established models. For example, if consumers believe that the people important to them, have a positive attitude regarding organic products, then they have a greater predisposition to the intention to buy organic food. This is called the "subjective norm," which is defined by the full set of available normative beliefs about the expectations of important referents for the person in question (e.g., family, friends, and significant others). As social trends have moved toward leading healthy lifestyles, this has had a strong influence on consumers' decisions to purchase organic products. This phenomenon was examined by I. Ajzen in his article "The Theory of Planned Behavior" back in 1991 (Ajzen, 1991).

It is worth paying attention to the patterns of influence of trust on the purchase of organic products. As stated earlier, the "transparency" of marketing and the messages that the producing company communicates to the consumer play a huge role in the purchase of products. According to the research «Trust and distrust in organizations: emerging perspectives, enduring questions» (Kramer, 1999), trust is a state of perceived vulnerability or risk that stems from individual uncertainty about the motives, intentions, and potential actions of others on which they depend. Hart and Saunder also pointed out that trust is one of the most effective methods of reducing consumer uncertainty. Trust may be even more important for organic products than for conventional foods. This is because cultivating trust is especially important when uncertainty and risk are inherent and assurances are often lacking (Crosby, 1990).

Moreover, consumers tend to have limited knowledge about organic products and their production, as a consequence, are not confident and do not understand the consequences of their food purchasing decisions. It is also believed that insufficient knowledge and awareness of organic products are considered to be important barriers to buying organic products. The lower the knowledge gained about organic products, the higher the uncertainty about organic food choices. Increased knowledge about organic products is critical to increasing organic food consumption, as knowledge strongly influences consumer attitudes that directly determine organic food purchase decisions or intentions. In an article titled "Exploring the gap between attitudes and behavior:



Understanding why consumers buy or do not buy organic food” (Padel & Foster, 2005) also confirmed that knowledge about organic food positively affects consumer perceptions and attitudes towards organic products.

According to a 2018 study by M. Massey, A. O’Cass, P. Otahal entitled "A meta-analytic study of the factors driving the purchase of organic food" (carried out in Australia) and based on the two types of data e yes/no consumer responses and opinions on a 7-point Likert scale, there was a difference between consumers’ positive perceptions and the intensity of perceptions of each of the food characteristics (see Table 1).

*Table 1 Pooled estimates of perceptions categorized by credence, search and experience attributes*

Attribute category	Perceptions	Pooled proportion,% <sup>1</sup>			Pooled mean <sup>2</sup>		
		Lower confidence interval (CI)	Upper CI	Proportion estimates	Lower CI	Upper CI	Mean estimates
Credence	Health benefits	58	74	66	4,43	5,3	4,865
	Safety	55	69	62	4,34	5,64	4,99
	Environmental impact	49	66	57,5	4,75	5,38	5,065
	Animal welfare	43	66	54,5	4,81	5,57	5,19
	Production practices	39	67	53	NA	NA	NA
	Nutritional value	43	63	53	4,62	5,58	5,1
Search	Quality	46	75	60,5	4,23	5,16	4,695
	Price premium	45	59	52	4,04	5,67	4,855
	Availability	35	56	45,5	3,89	5,1	4,495
	Appearance	22	66	44	4,53	5,1	4,815
Experience	Taste	38	53	45,5	4,45	5,06	4,755
	Freshness	44	73	58,5	NA	NA	NA

*Source:* compiled by the author on the basis of Massey, M., O’Cass, A., & Otahal, P. (2018). A meta-analytic study of the factors driving the purchase of organic food. *Appetite*, 125, 422

Based on the data in the table we are able to break down the set of factors for the purchase of organic products into four groups (Group 1 – the highest score; Group 4 - the lowest score or NA) how it is presented in Table 2.

<sup>1</sup> Expressed as percentage of population that displayed positive perceptions and behaviors. 95% confidence intervals indicate consumers' inconsistency in their opinions on appearance, ranging from 22% to 66%. For other characteristics of organic food consumers' opinions were more consensual.

<sup>2</sup> 95% confidence intervals indicate deviating opinions about price premium, ranging from 4 to 5.7 on a 7-point Likert scale; consumers have more consensual opinions about the other characteristics.

Table 2 Systematization of factors and match analysis

Perceptions	Pooled proportion	Pooled mean	Matches	The amount of heterogeneity in behavioral variables associated with perceptions <sup>3</sup>	
				Intention to purchase mean	Regular purchase proportion
Health benefits	Group 1	Group 2	None	0,8 (72,1%)	0,042 (6%)
Safety	Group 1	Group 2	None	0,883 (85%)	0,04 (7%)
Environmental impact	Group 2	Group 1	None	0,636 (79%)	0,054 (27%)
Animal welfare	Group 2	Group 1	None	0,329 (0)	0,114 (0)
Production practices	Group 3	Group 4	None	0	0,025 (0)
Nutritional value	Group 3	Group 1	None	0,953 (96%)	0,035 (75%)
Quality	Group 1	Group 3	None	0,887 (66%)	0,075 (0)
Price premium	Group 3	Group 2	None	1,096 (86%)	0,053 (0)
Availability	Group 4	Group 3	None	-1,91 (48%)	0,068 (34%)
Appearance	Group 4	Group 2	None	- 0,22 (53%)	0,071 (0)
Taste	Group 4	Group 3	None	0,971 (75%)	0,061 (13%)
Freshness	Group 2	Group 4	None	0	0,041 (77%)
<i>the need for additional analysis for clear conclusions</i>					

Source: compiled by the author on the basis of Massey, M., O'Cass, A., & Otahal, P. (2018). A meta-analytic study of the factors driving the purchase of organic food. *Appetite*, 125, 422-423

As we can see, stronger intention to purchase organic food occurs when consumers have higher perceptions of its nutrition, taste, impacts on the environment and animal welfare, quality, safety, health and price. Unlike intention to purchase which is associated with a variety of perceptions, regular purchase of organic food is mostly associated with two main factors - freshness and nutrition.

This study also opens the discussion about the possibility of managing consumer behavior through marketing and advertising tools. For instance, when aiming to increase sales among

<sup>3</sup> \* $p < .01$ . Regression estimate with R2 in brackets. Mean data: For an additional 1 unit rise in attitudinal variable results in an estimated rise in a mean score of a behavioral variable. Proportion data: For an additional 1 unit rise in attitudinal variable results in an estimated rise in a proportion of respondents identifying a behavioral variable as important. Missing values are indicated with "0" due to a low number of studies insufficient for a regression analysis. There was not enough data for computations related to Intention proportion and Regular mean estimates.

consumers for whom organic food is a regular part of their diet, authors advise emphasizing credence attributes such as, quality and higher animal welfare. Whereas to attract new customers the largest consideration is increasing availability as it was found to be a bigger barrier to purchase more so than price premium for organic. Positive consumer perceptions of other characteristics of organic food such as nutrition, taste, and animal welfare, which contribute to organic food purchase if used in promotions are advised to be exercised with caution due to regulatory constraints.

Acknowledging that organic consumers are not homogenous, and are differentiated by their purchase decisions, the findings of this study are aggregated on a study level rather an individual level.

An unusual approach to the study of consumer behavior in the organic market is dismantled by A. Tandon, F. Jabeen, S. Talwar, M. Sakashita and A. Dhir in their paper "Facilitators and inhibitors of organic food buying behavior" (2021) (analysis of Japanese consumers behavior). The mechanism for identifying behavioral patterns is based on the formation of a number of hypotheses tied to factors such as ecological welfare (EW), nutritional content (NTC), natural content (NC), combined with three barriers such as value barrier (VB), risk barrier (RB) and risk barrier (RB).

The study formulated twelve hypotheses regarding the nature of the influence of health care on factors and risks, as well as the influence of factors and risks on consumer behavior. The results are presented in the Figure 1 (confirmed hypotheses are highlighted in green, and disproved hypotheses are highlighted in red).

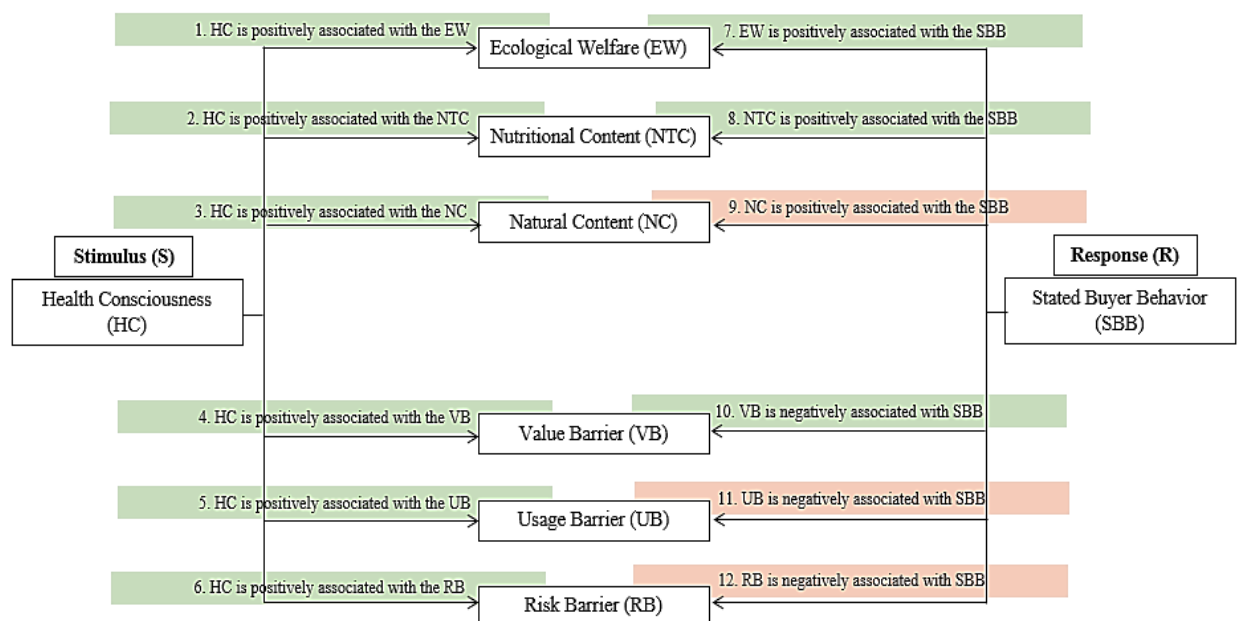


Figure 1 The results of the hypotheses of the relationship of factors and barriers to the purchase of organics

*Source:* compiled by the author on the basis of Tandon, Anushree & Jabeen, Fauzia & Talwar, Shalini & Sakashita, Mototaka & Dhir, Amandeep. (2020). Facilitators and inhibitors of organic food buying behavior. *Food Quality and Preference*. 88. 4-9

As we can see, The results support H1–H8 and H10. Support for H1 to H3 implies that consumers who are conscious of health-related issues will be positively oriented toward organic food items. The actions of health-oriented consumers are reinforced because of their perception that such food is environment as well as animal friendly and delivers higher nutritional and natural content than food grown through conventional means. These positive aspects of organic food represent the internal state of consumers regarding the facilitators (EW, NTC, and NC).

However, this positive association of HC with EW, NTC, and NC translates into SBB only for the first two facilitators, implying support for H7 and H8. This means that, despite the prediction based on prior research, the perceived naturalness of organic food items, as hypothesized by H9, does not translate into their purchase. In the course of interpreting the causal relationships of hypotheses H4-H6, the authors tend to think that that consumer who are self-conscious about their health and well-being would be more likely to be cognizant about the authenticity, potentially dubious labeling, and high pricing of available organic food products.

Only H10, which hypothesizes a negative association between the VB and SBB, is supported, indicating that pricing is a major concern for Japanese shoppers which can dissuade them from buying organic food items. UB does not have a significant negative influence on SBB (H11), implying that access to information and the actual availability in stores do not concern Japanese consumers. H12, hypothesizing the negative association of RB with SBB, is not supported. On the contrary, the results reveal an interesting and statistically significant positive association. Though this association needs to be confirmed by repeating the study with a larger sample, this finding is not entirely implausible.

When studying the factors of consumer behavior in the purchase of organic products in Spain ("Choices in Sustainable Food Consumption: How Spanish Low Intake Organic Consumers Behave", 2021) T. Madureira, F. Nunes, J. Veiga and P. Saralegui-Diez used the categorization of factors, followed by the evaluation of respondents from the most relevant to the most irrelevant. Key perceptions with subsequent importance evaluation are presents in Table 3.

*Table 3 Analysis of the level of importance of factors of the purchase of organics*

Perceptions	Times Selected Best	Times Selected Worst	Standardized Ratio Scale	Level of importance
Health benefits	572	13	100	1
Environmental impact	320	24	55,1	2
Absence of GMOs	249	109	22,8	3

Nutritional value	171	117	18,2	4
Origin	185	168	15,8	5
Certification warranty (EU logo)	188	230	13,6	6
Availability	123	270	10,2	7
Expectation of better taste	97	261	9,2	8
Price	70	306	7,2	9
More natural appearance	25	502	3,4	10

*Source:* compiled by the author on the basis of Madureira, T.; Nunes, F.; Veiga, J.; Saralegui-Diez, P. Choices in Sustainable Food Consumption: How Spanish Low Intake Organic Consumers Behave. *Agriculture* 2021, 11, 1125. 7-10

It is clear that the belief in obtaining health-related benefits is the primary determinant in the choice/consumption of organic products. Environmental impact is the second most important attribute on the purchase process, but nearly half of health issues. Together, these two attributes explain the main motivations to buy organic products in Andalusia.

The remaining eight attributes—the absence of GMOs, nutritional value, origin, certification warranty (EU logo), availability, expectation of better taste, price, and more natural appearance—have negligible importance when compared with the former two. Furthermore, they are also very similar in their relative weight.

Within the framework of the conducted study, the authors separately emphasized the importance of education in terms of organics. Authors found that the academic level of consumers and the place where they buy organic products explain the importance of the absence of GMOs. The lower the academic degree, the greater importance this attribute assumes, as the organic certification label is associated with the absence of GMOs.

Based on the reviewed research and analytical materials, we have the opportunity to systematize the results and try to identify key factors that influence consumer behavior in the organic market. To do this, we will compile a summary Table 4.

Table 4 Identification of key factors of the purchase of organics

Perceptions	Australia	Japan <sup>4</sup>	Spain <sup>5</sup>	Match	Importance score (from 1 to 3)
	M. Massey, A. O'Cass, P. Otahal	A. Tandon, F. Jabeen, S. Talwar, M. Sakashita and A. Dhir	T. Madureira, F. Nunes, J. Veiga and P. Saralegui-Diez		
Health benefits	×	× ( <i>Usage barrier</i> )	×	3/3	1
Safety	×	× ( <i>Risk barrier</i> )		2/3	2
Absence of GMOs	×	× ( <i>Risk barrier</i> )	×	3/3	1
Environmental impact	×	× ( <i>Ecological welfare</i> )	×	3/3	1
Animal welfare	×	× ( <i>Ecological welfare</i> )	× ( <i>origin</i> )	3/3	1
Production practices	×	× ( <i>Natural content</i> )	× ( <i>origin</i> )	3/3	1
Nutritional value	×	×	×	3/3	1
Quality	×	× ( <i>Usage barrier</i> )		2/3	2
Price premium	×	× ( <i>Value barrier</i> )	×	3/3	1
Availability	×	× ( <i>Value barrier</i> )	×	3/3	1
Appearance	×		×	2/3	2
Taste	×		×	2/3	2
Freshness	×			1/3	3
Certification warranty		× ( <i>Risk barrier</i> )	×	2/3	2

Source: compiled by the author

Based on all of the above, we can conclude that the group of factors that determine the behavior of consumers when choosing organic products (taking into account the possible barriers) are: the health benefits, the lack of GMOs in the product, the desire to take care of the environment (including animals), production processes, nutritional features of products, price and, therefore, the availability of organics.

Separately, we would like to note the fact that these studies did not raise the question of consumer interpretation of the terms "eco", "bio", "natural" and "organic", which automatically indicates a sufficient level of public awareness on this issue and the lack of "mixing" of terms.

However, raising the question about the factors of choice of organic products in Russia, special attention should be paid to consumer stereotypes and myths related to this issue. Portal

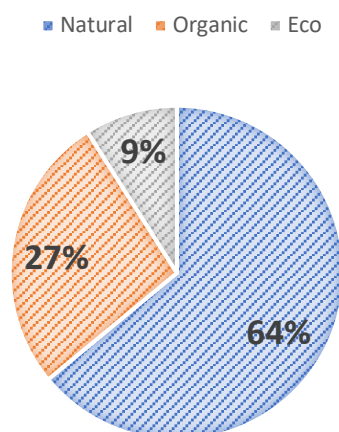
<sup>4</sup> *Ecological welfare includes desire to take care about environment and animals. Natural content includes desire to know about production. Usage barrier includes the desire to be sure that the products you consume are good for your health, that they are of the right quality. Value barrier is justified by the desire to buy organic at the best price. Risk barrier is due to the "questionable" safety of the products, the potential presence of GMOs in them.*

<sup>5</sup> *"Origin" can be interpreted as desire to know about production (which is correlated to animal safety).*

"Plus one.ru" published three key myths that are most often faced by consumers of organics (Chernysheva, 2021). First, it is important to remember that concepts such as "eco," "bio" and "organic" are not interchangeable. Moreover, the quality of "organic", both in Russia and in other countries, is regulated by law, while the production process of natural, farm, organic and bio products is not subject to state supervision. Secondly, despite the fact that organic" contains a minimum of synthetic pesticides and fertilizers and is free of hormones and antibiotics, this does not mean that such food has more nutritional value compared to counterparts. And thirdly, the high price of organic products is justified by the serious requirements for growing plants and livestock, environmental protection, high production costs, small supply volumes. The system of production of such products is difficult to scale due to the scattered nature of enterprises.

The Center for the Study of Consumer Behavior of the Russian Quality System surveyed 1,000 people aged 18 years and older living in cities with a population of 100,000 or more from all federal districts of the Russian Federation and found out how often Russians buy organic products and whether they know how to distinguish them from conventional products. The survey showed that among those who regularly buy organic products, men are more common than women (28% vs. 22%). Also more interested in such products people aged 18 to 34 years. The highest percentage of residents who regularly buy organic is in Siberia (30%), the lowest - in the Central Federal District (22%).

82% of respondents reported that they buy organic products. At the same time, as it turned out in the survey, the vast majority does not see the difference between the terms "organic", "natural", "bio", "eco" and considers these words synonymous. Depending on the labels on the product packaging, 64% of respondents buy "natural" products, 27% buy "organic" and 9% buy "eco" (Figure 2).



*Figure 2 Structure of purchases labeled "natural," "organic" and "eco"*

*Source:* compiled by the author on the basis of Russian Quality System: Under the guise of organic products Russians are buying conventional products

Moreover, according to the survey (RosKachestvo, 2021), 63% of Russians trust the specialized label and 54% know that it is the national organic label. The findings of the study of the Russian Quality System are presented in Table 5.

*Table 5 Consumer understanding of the terms "eco," "bio," "natural," and "organic"*

Term	Mandatory certification	Mix of concepts		Reason for equating	Need for certification and clear explanation
		equating	%		
Eco	-	Natural ≈ Organic	66	Natural, created by nature, not man-made, cultivated without chemical fertilizers	+
Bio	-	Organic ≈ Eco	54	Degradable in nature, care for the environment and animals	+
Natural	-	Organic ≈ Bio	46	Non-GMO, no chemicals, no preservatives, cultivated without chemical fertilizers	+
Organic	+	Natural ≈ Bio	17	Degradable in nature, not man-made	+

*Source:* compiled by the author on the basis of Russian Quality System: Under the guise of organic products Russians are buying conventional products

This study confirms the previously formulated hypothesis that, despite the desire of Russians to buy organic products, the labeling system does not simplify the process of making a consumer decision, but only complicates it. This fact, in turn, once again points to the lack of transparency of the certification system and the subsequent labeling of organic products.

This hypothesis is confirmed by a study of the analytical center "NAFI" together with the Russian System of Quality from January 2020, which revealed that every fifth Russian believes that products labeled "bio", "eco", "organic" are better than products sold without such labels, and every third is ready to overpay for a product if it will be marked with the state organic product label. Russians were divided in their assessment of products labeled "bio", "eco" and "organic":

1. Every second (50%) believes that these products do not differ in any way from products without such a label.
2. One in five (20%) believe that such products are generally better than conventional products.
3. 13% of Russians have never seen products labeled "bio," "eco," or "organic" on the shelves.
4. More often than any other respondents (25%, the national average is 20%) and young people aged 18-24 (30%) claim that such products are better.

Not all consumers are guided by the special labels on the packages. While 14% of Russians only shop for products labeled "organic," "eco" and "organic," 23% pay attention to those labels



but don't place a high value on them. The greatest demand for products with these labels is among residents of cities with more than one million inhabitants (20%). 62% percent disregard these labels. One in three Russians (34%) are willing to overpay for a product if it bears the state organic label and the product itself is produced without the use of pesticides and plant growth stimulants. More often than others, people with high incomes (39%) and women (37%) are willing to pay more for such products. 60% of Russians are not yet ready to overpay for products with organic labels (Analytical Center "NAFI", 2020).

In the work "Motives for consumption of organic food" (Plotnikova & Kiyana, 2019) several key consumer aspects of the choice of organic products were identified. Consumers purchase this group of products because of their desire to avoid the consumption of chemicals used in the production of conventional foods, the use of which consumers often associate with long-term harmful and often unknown consequences for their health. The perceived usefulness of organic foods is a quality-of-life parameter for many consumers. The second motive for the consumption of this group of products is their higher taste qualities. Product taste is almost the most important criterion when buying organic food. A series of blind taste analysis style experiments have been conducted. The researchers found that organic foods were perceived to taste better than conventional foods. It should be noted that this finding was not confirmed in every case and cannot be applied to all categories of organic foods.

Many studies have shown that environmental concerns affect consumer perceptions of organic products. Consumers believe that the chemicals and pesticides used in conventional food production are environmentally harmful. While the production of organic products is perceived as environmentally friendly. As a result, the third motive for the consumption of organic products is a concern for the safety of the environment, this type of consumption is seen as an additional factor in solving environmental problems (Chukhlantsev, 2019).

The development of the organic market closely resonates with the desire and desire of people to care about the environment. Therefore, we can say that concern for the environment - one of the important factors influencing consumer behavior in the selection and purchase of organic products. This hypothesis is confirmed by the fact that back in pre-crisis 2019, 35% of global customers surveyed claimed to buy organic products to help nature. 37% specifically looked for products in eco-friendly packaging, and another 41% rejected plastic whenever possible. Quarantine, on the other hand, has forced customers around the world to slow down and think about their habits - especially consumer habits. From February to April 2020, the number of "how to live more sustainably" queries on Google increased by 4,550%.

The main mistake brands make when planning eco-campaigns is insincerity. In an attempt to earn "social approval points," brands can launch initiatives they don't believe in and campaigns whose values they don't share.

Potential customers are highly sensitive to this kind of insincerity (RSO News, 2019). For example, 31% of customers said that companies that engage in environmental activism are simply trying to make money off a hot topic. For example, several brands in recent years have launched the sale of drinking water in TetraPak packaging - juice and milk are sold in the same boxes. In positioning and advertising campaigns brands claim that such packaging is an eco-friendly substitute for disposable plastic. It is made from recycled wood and is allegedly not harmful to nature. In practice in Russia there are only some recycling points of TetraPak, and the process is extremely difficult and ineffective. Plastic is more environmentally friendly than boxes. Bloggers and users of social networks reacted sharply, criticizing the use of TetraPak.

Thus, we can conclude that at the moment the consumption of organic products goes beyond the standard concern for their health. Many Russians, especially members of the younger generation (Generation Z), seek to expand the scope of their understanding of the terminology of the organic market, "deepen" in the study of the processes of production, processing, receipt of a particular product. Patterns of consumer behavior are evolving from a "blind" purchase based on available information and attractive price to the conjunction of product choice with lifestyle and attitude towards the environment. That is why the need for a clear understanding of product labels, distinctive signs on packages, QR codes in the ability to navigate to the source of product information is becoming increasingly important. The creation of a consumer information system, not only covering the key aspects of the production and sale of organic products, but also understandable for the "ordinary" consumer may well be seen as an essential step in the development of the Russian market of organic products.

To conclude, it should be said that there are various factors that influence consumers' purchase decisions, however, only factors by themselves are not enough for developing a system. For that reason, it is necessary to learn situational factor that could supplement a system. Therefore, in the next paragraph I suggest having a look at COVID-19 as a situational factor because the impact of pandemic has irreversible consequences and impact on consumers' purchase decisions.

## **1.2 COVID-19 pandemic as a situational factor, affecting consumers**

The purpose of this paragraph is to identify changes in the factors of consumer behavior of Russians in the market for organic products under the influence of the pandemic. The logic of the paragraph is as follows: we have studied a number of research that consider consumption during the pandemic, explored consumers' understanding of the terminology in the market of organic

products, analyzed and identified factors before the pandemic during and after, identified key factors of the choice.

The question of what the consumption habits of the Russian population will be is still considered open. But one thing is certain: the trend of taking care of one's own health by switching to a healthy lifestyle is a long-term one. According to NielsenIQ research (NielsenIQ, 2020), a wide range of quality fresh produce, which was one of the main trends in convenience stores before the quarantine, now has a good chance to settle in online as well, breaking the skepticism of some consumers about the quality of the categories of fresh produce online. Once the period of self-isolation ends, the FMCG online shopping market will establish itself at a new level, and it is important for brands to take advantage of this advantage now to finally win the hearts of those consumers who are using such services for the first time.

A survey of CEOs of FMCG companies, which were the first in the world to return to normal after the epidemic, showed that only 20% of the surveyed CEOs will postpone or completely abandon the launch of new products. Among the rest - 55% will keep the chosen course (transition to organic), 20% will redesign the concept taking into account trends for hygiene and health and 5% will launch products in new categories for themselves to use the emerging potential. It is worth considering separately the placement of the novelty in the online channel: the share of online FMCG in the structure of the entire FMCG market increased in March from 1.8% to 3%, and some of this growth is highly likely to consolidate in the short term. The coronavirus pandemic has quickly changed the lives of shoppers and their habits, and many of these changes will have a lasting effect on consumption patterns. Today, the popularity of online services has peaked, shoppers are signaling new needs, hygiene and health concerns have reached new levels, and quality is moving up the list of product choice factors.

During the COVID-19 pandemic, there was a growing interest of Russian consumers in organic products. There may be several reasons for this - from obtaining useful information and the formation of a desire to "be on trend" to the desire to maximize the level of care for their own health. This trend has necessitated the re-engineering of Russian companies' value-added processes.

The concept of organic or "green" marketing is inextricably linked to the issue of mass marketing of organic products. According to the research "Changes in consumer behavior and marketing trends, changes after the pandemic COVID-19" (Brikota, Nasybulina, Popova, & Fedorov, 2020) note the fact that the consulting company "Accenture" together with Oxford Economics conducted a study and revealed that only 12% of corporations were able to adapt quickly to new market conditions during the pandemic COVID-19, which suggests that modern business models require constant improvement and updating. Early adaptation in the commercial

marketplace, relying first and foremost on the desires of the consumer, is the key to a successful and profitable business.

While some researchers point out that the Russian market of organic products after the coronavirus infection faced increased demand, others - for example, A. Skripka believe that the product with labels "eco", "organic" and "organic" now stagnates on the shelves. Internet marketplaces are not used as actively as we would like them to be (Skripka, 2020). The reason is clear - the income dropped, and even those whose earnings remained at pre-crisis level, try to reduce spending. However, after the end of the coronavirus pandemic, the situation may change. The pandemic situation has shown that we need to take better care of our health. It's easy to assume that people will want to buy healthy, organic food that boosts immunity. After all, it depends on both what we consume and the conditions we are in. So, the demand for organic food will increase. Moreover, in addition to special grants organic producers can use a wide range of measures of state support for small businesses. In addition, experts often take care of marketing support.

Chairman of the Board of the Union of Organic Agriculture S. Korshunov in his interview (AgroExpert, 2021) noted that the organic segment of the world food market is actively developing due to the growing demand for healthy lifestyles and responsible consumption. Coronavirus pandemic additionally spurred the demand for organics as a source of "natural immunity". In this situation, Russian producers have a good chance to seriously increase the export of organic products. To support exports, the Federal Center "Agroexport" is developing a concept for the promotion of organic products in foreign markets. There are several certified companies in China, which began to deliver in the last two years. There are shipments to Japan as well, which is also an interesting market, but very peculiar.

In October-November 2020 the specialists Social Project Center "Platforma" with the support of X5 Retail Group and Skolkovo Moscow School of Management Consumer Market Development Center conducted an online survey on the basis of OMI: 1600 panel among respondents aged 18 and over living in cities with a population of over 100000 people (Platforma, 2020). The key research questions were: "How do consumers understand proper and healthy nutrition and what place do natural products play in it?", "How well do consumers understand the labels 'eco', 'bio', 'organic'?", "What are the ways to improve label transparency?", "How to increase consumer confidence without labeling?" According to the survey, 49% of respondents today are interested in healthy eating, giving the concept different meanings.

This study confirmed the hypothesis of the Chairman of the Board of the Union of Organic Agriculture S. Korshunov that the pandemic has only strengthened the desire of Russians to take care of their health through the consumption of organic products. The COVID-19 pandemic has

strengthened this trend - over the past six months, Russian citizens have begun to attach greater importance to a healthy lifestyle (one in four respondents are interested in healthy eating, 25%).

The focus of attention on naturalness appears to be related to perceptions of the negative consequences of consuming artificial additives rather than the benefits. At the same time, the connection between naturalness and consumer health is not obvious, and the consumer properties of natural products are not always clear. There is no consensus on this issue among experts: some of them point to the lack of evidence for the association of natural, organic products and healthy lifestyles, and the need to simply monitor the safety of food.

The sensitivity of the topic of health and the difficulties encountered by people without special knowledge when choosing products determines the request for labeling: 92% of respondents would like natural products to be distinguished by a special sign, which is controlled by the state; 85% report that they pay attention to labeling (27% do so regularly). The most familiar labeling to consumers is "non-GMO", also almost half paid attention to the labeling "eco" or "bio", a quarter - to the labeling "organic" (Platforma, 2020).

After conducting a general survey, respondents were asked to respond in more depth to the question of what they understood by the terms "organic", "eco" and "bio". Based on the respondents' answers, a summary Table 6 was compiled.

*Table 6 Consumers' understanding of the terminology in the market of organic products*

	Organic	Eco	Bio
General opinion (based on Table 5)	Natural, created by nature, not man-made Artificial Healthy Cultivated without chemical fertilizers Non-GMO Degradable in nature No chemicals, no preservatives		
Additional knowledge	Implies the natural conditions under which animals are kept (free grazing of meat and dairy cattle) "Live," without using preservatives	Growing in an environmentally friendly area Made from eco-materials (packaging) Minimal environmental damage on the production side	Containing bio-additives (live bacteria) Naturally occurring Implies recyclability, secondary production

*Source:* compiled by the author on the basis of Retail Lab; Issue 7 “Cult of the Natural”

Difficulties with terms that are new to the consumer form the demand for clear navigation. Given that the basis of consumer demand is health, experts talk about the need for a comprehensive approach to such navigation, forming a culture of nutrition. Retailers, such as X5, are beginning to turn toward cultivating consumers' healthy habits and the ability to assemble a well-balanced basket. The general trend towards differentiation of consumption patterns and understanding of good nutrition creates the basis for increased demand for niche product categories. Most likely,

we should expect this demand to shift to the online retail space, where shelf size is not limited and there are opportunities for additional labeling of goods and individualization of the offer.

If we apply the approach of hypothesis building on the influencing factors and barriers that form the relationship between health care and consumer behavior (by A. Tandon, F. Jabeen, S. Talwar, M. Sakashita and A. Dhir) for Russian consumers, it will look as shown in the figure 3.

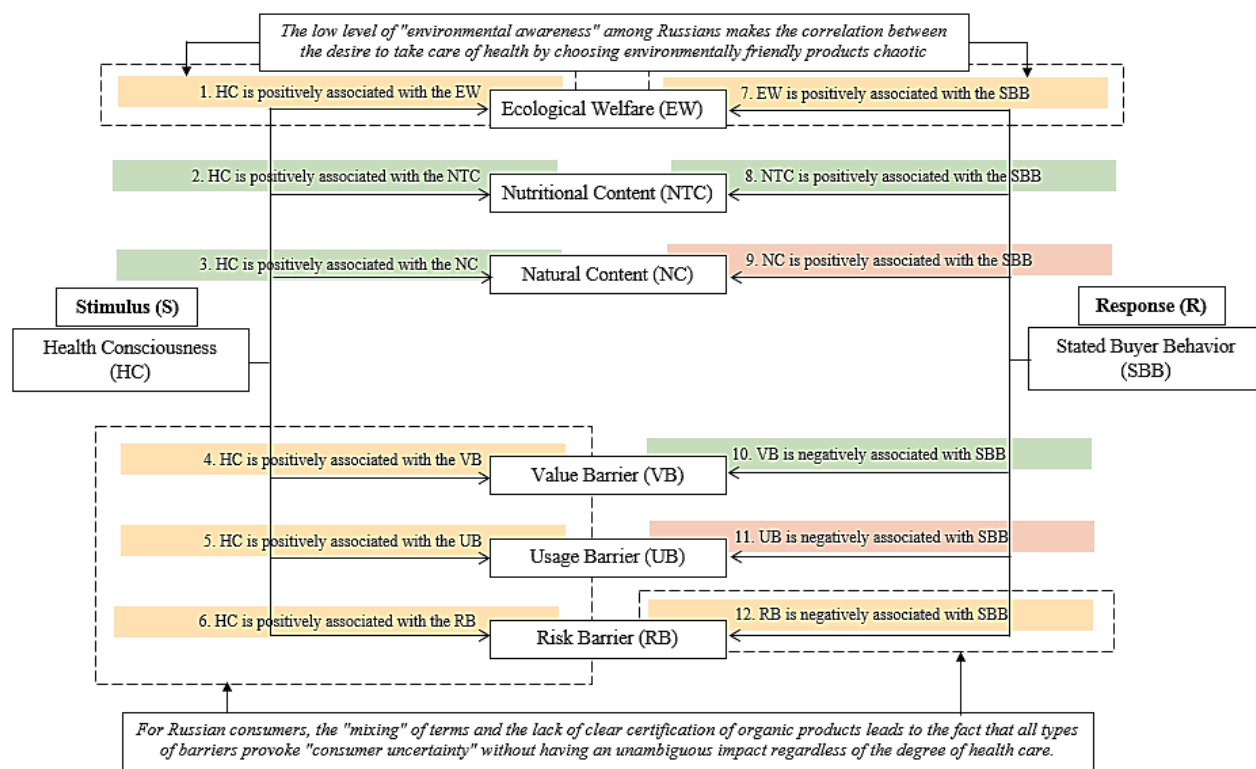


Figure 3 Hypotheses of the relationship of factors and barriers to the purchase of organics by Russian consumers

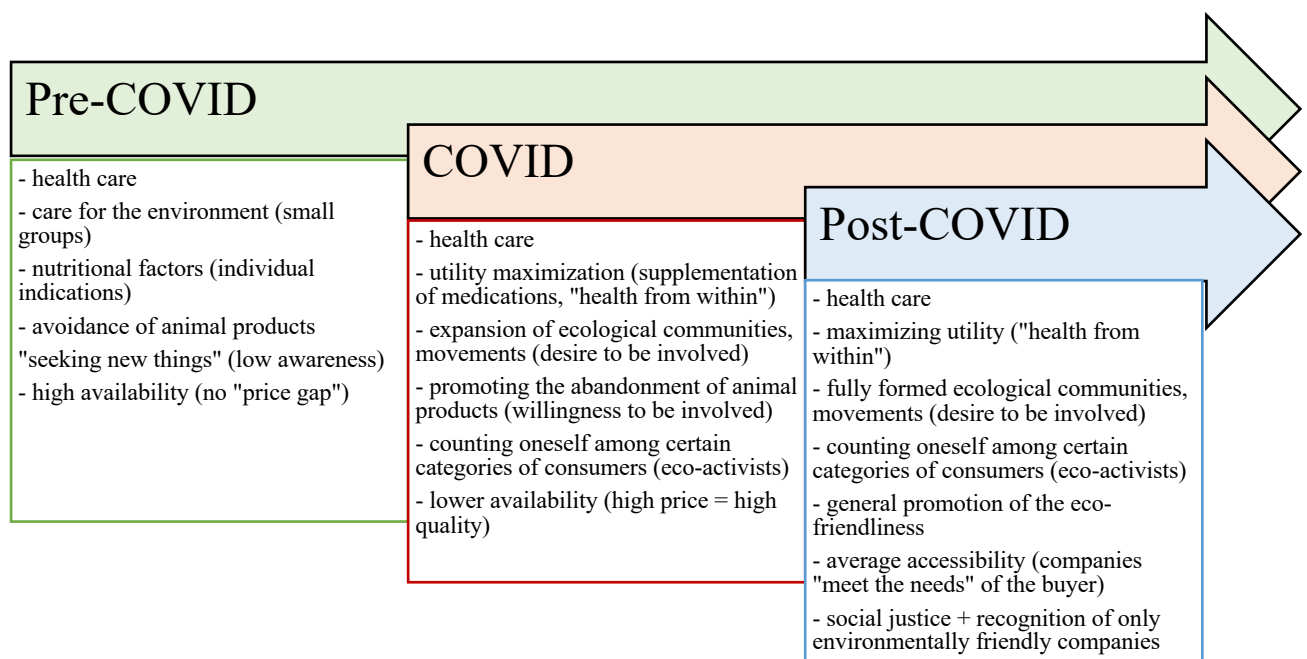
Source: compiled by the author

As we can see, now H4-H6 are in in the "zone of uncertainty". This is due to the fact that for Russian consumers, the "mixing" of terms and the lack of clear certification of organic products leads to the fact that all types of barriers provoke "consumer uncertainty" without having an unambiguous impact regardless of the degree of health care. The emergence of new information and expanding the scope of knowledge about organics, on the one hand - contributes to a more informed choice of products, on the other - complicates this choice without proper official support in the form of labeling and certification (minimizing the risk of greenwashing and purchase of low-quality products).

H1 and H7 are unclear because The low level of "environmental awareness" among Russians makes the correlation between the desire to take care of health by choosing environmentally friendly products chaotic.

However, by mid-2021 (SberMarketing, 2021), 50% of global respondents said they had become even more interested in the environment, and in some markets, 86% at once. People who still work from home find it easier to watch their habits and avoid plastic, for example, they can cook at home and don't need to use packaging for meals. Over the past year, users have become more attentive to brands' stances on important social issues. This is especially true for "Zoomers" - in a recent survey, for example, 21% of Gen Z said they value social justice in advertising above all else. On average, 58% of customers say they pay attention to the brand's stance on social issues. Social responsibility and sustainability are considered key characteristics of a trustworthy brand by 56% of respondents. Another 55% pay attention to ethical production. Despite the fact that 2019 to 2020 by 1/3 increased the number of Russians who are willing to pay more for organic food - so answered 43% of respondents. (By December, 69% of Russians were already willing to overpay for eco-friendly goods), in June 2021, 44% of people surveyed said they don't buy zero waste and eco products because of their high price.

If you try to depict the totality of the factors affecting consumer behavior in the organic market in the period before COVID-19 to the present (can be conventionally labeled "post-COVID"), it would look like this *Figure 4*.

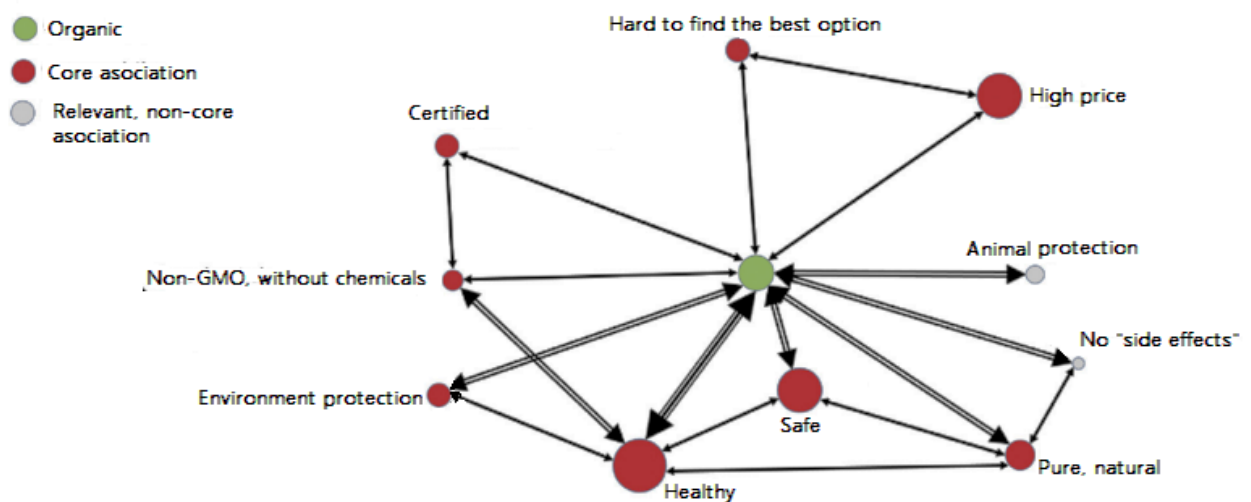


*Figure 4 Evolution of factors influencing consumers' organic product purchase decisions*

*Source:* compiled by the author

Based on the figure 6 it can be concluded that the main distinguishing characteristics of post-COVID time are desire of people to be involved in ecological communities, general

promotion of the eco-friendliness. Also, it should be noticed that recognition of only environmentally friendly companies raises on very high level. Such ambiguous data obtained during the study of research and analytical work makes it necessary to form a "map of the way" the consumer when choosing and purchasing organics. In the framework of the creation of the map, factors such as belonging to certain groups and, therefore, conscious refusal to consume certain categories of products will not be relevant due to the assumption that the purchase of organics is a planned nature. In other words, organic products are very rarely put objects of "random demand". As a rule, the consumer knows what, where and for what reason he goes. The choice is based on those factors, which are presented as a map in the *Figure 5*.



*Figure 5 "Map of organics consumer's way"*

*Source:* compiled by the author

Health care and security concerns are clearly key factors that influence organic consumption and this is also confirmed by previous researches. As we can see, environmental protection is also one of the key factors due to mass popularization of eco-friendliness (not only about the consumption of organics, but also about production processes, the possibility of recycling and safe disposal). High price and inadequate product availability in stores also emerge as important associations. High price and low product availability, however, could be perceived as a signal of quality and high value of the product. The view that organic food is tasty also emerged, although sensory features are probably not the main motivation for purchase. This peculiarity also causes the possibility of another consumer stereotype that organic is only for certain social classes with incomes above average.

Quite interesting is the factor of increasing the degree of significance of the presence of distinctive signs on products, which once again points to the hypothesis that this type of labeling and certification can have a positive impact on lowering the risk barrier and the use barrier.



According to the news resource "Adindex" organic products with a state certificate are twice as fast as those without the "organic" label (Adindex, 2021). The unified state register of organic products appeared only at the end of 2019, and to make progress in terms of popularization of organic products, not only the efforts of major federal players to expand their representation in the range, but also appropriate information support: communication of availability, availability and benefits of organic products.

Thus, we can conclude that on the one hand - during the pandemic, the level of awareness of real and potential consumers of organic products significantly increased, which in turn led to a rationalization of demand for organics through the minimization of chaotic acquisitions regardless of the "transparency" of the manufacturing company, the availability of documented characteristics of the product and determine its real useful properties (subjective for each individual consumer).

On the other hand, the factors of socio-economic development have caused changes in the volume of production of Russian companies, the growth of costs for marketing research, modernization, addition and improvement of sales communication networks. Consequently, the degree of availability of organic products significantly decreased. However, the desire for a healthy lifestyle, awareness of all the positive aspects of the transition to organic products pushes consumers to its purchase, as evidenced by numerous studies, as well as the dynamics of the Russian organic market.

As in the reviewed studies of consumer behavior in the organic markets in Australia, Japan and Spain, for Russian consumers the top three factors in making a decision in favor of buying organic are: health (including nutritional factors), safety (including production, raw materials), care for the environment. As a key (and virtually the only) barrier to purchase is the price, which can be supplemented by the overall availability in terms of territorial unevenness in the distribution of organic producers, the lack of distribution points, etc.

### **1.3 Organic products market of the Russian Federation: summary and trends**

The purpose of this section is to provide statistical support for hypotheses about the growth of the organic market and the increased demand for these products due to changing consumer preferences due to the pandemic.

Within the framework of writing this graduate qualification work the term "organic products" means products of plant, animal, microbial origin, as well as aquaculture in natural, processed or processed form, consumed by humans for food, resulting from the production certified for compliance with national standards for the production of organic products (organic products) in accordance with the legislation of the Russian Federation on technical regulation.

According to the National Organic Union of the Russian Federation and FIBL (Research Institute of Organic Agriculture), the market for organic products is one of the fastest growing in the world. From 2000 to 2019, it grew more than seven-fold (from \$18 billion to \$129 billion), showing maximum growth in 2018-19 of more than 16% per year (Statista, 2021) (Figure 6).

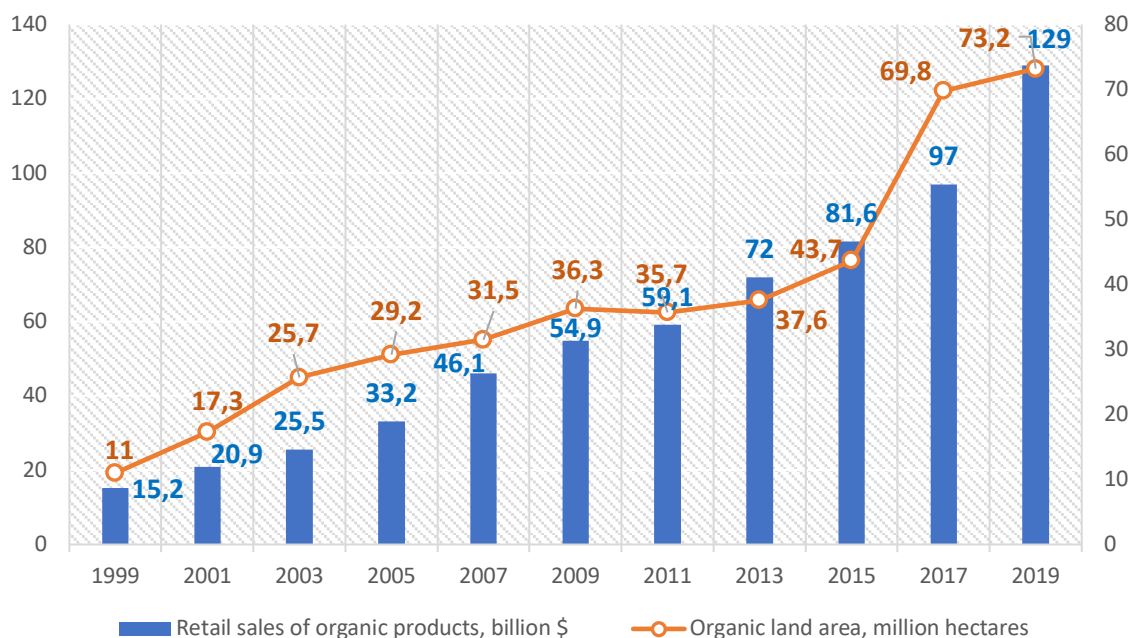


Figure 6 State of the world organic products market

Source: compiled by the author on the basis of Global Business Data Platform “Statista”: Organic market in the world and Russia in 2021

The study confirms the hypothesis that the key to the development of organic market is the cultivation of "organic" land, which, in turn, requires the involvement of a large number of economic entities with licenses and certificates.

Despite the fact that in Russia, according to the National Organic Union, about 390 thousand hectares of land are certified at the end of 2019 (according to FIBL - 674 thousand hectares) for organic agriculture and 133 thousand hectares for organic wild plants, it is not enough to fully fill the market.

In Russia, (National Organic Union, 2021) at the beginning of January 2021 there were 130 certified companies engaged in the production and sale of organic products. Another 30-50 companies were at the stage of conversion. Of these, 60 have Russian certificates, 82 have international certificates (12 companies have dual certification). Of these: 117 companies produce food products, raw materials and feed, 9 biological drugs and fertilizers, 4 certified traders and stores.

A great role in the development of the Russian market for organics is the state involvement and control of the sector. Despite the fact that Russia's Organic Law was not passed until August

3, 2018, and went into effect on January 1, 2020 <sup>6</sup> the organic market has shown steady growth of 10% annually (except for the crisis in 2014, when growth was about 4%).

Despite this, from 2010-2014 the Russian market showed quite intensive growth - on average 10% per year, but the crisis of 2014 and a number of indirect factors led to the fact that 2015 - 2016 the market reduced the growth rate to about 4% per year.

Over the past twenty years, the Russian market of organics in monetary terms has grown by 176 million euros. Despite such a large growth our share of the world market is only 0,18%. At the same time Russia, given the natural conditions, low environmental pollution, development of transport infrastructure, availability of pastures has significant opportunities for the implementation of organic farming system.

The rate of market growth and the volume of supply at the moment are not able to fully meet consumer demand for organic products. In order to bring the situation in the market, Russia needs to increase the number of certified companies - at least 200-300 per year, optimally up to 1000. In this case, within 8-10 years we can approach the figures of leading European countries.

At the moment there are active discussions on the development of the Russian market for organic products. Forecasts built on the basis of statistical data and analysis of development trends are presented in Table 7.

*Table 7 Prospects for the development of the Russian market of organic products*

Indicator	Present time	Realistic forecast	Optimistic outlook
Production volume of organic products	0.06% of the world's volume (55-60 million euros)	10-15 billion euros by 2035 (about 6% of the world market)	20-25 billion euros by 2035 (about 10% of the world market)
Organic market volume	0.18% of the global volume (about 193 million euros)	1-3 billion euros by 2035	5-10 billion euros by 2035
Export volume of organic products	About 20-25 million euros	About 5 billion euros by 2035	About 10-15 billion euros by 2035
The number of consumers of organic products	Less than 1%	Up to 3-5% by 2025-2030	Up to 10-15% by 2025-2030
The number of certified lands	0.54% of the global volume (392 thousand hectares of agricultural land, 133 thousand hectares of "wild" land)	About 7% of the world's volume (more than 3 million hectares) by 2035	About 30% of the world's volume (13 million hectares) by 2035

<sup>6</sup> "Федеральный закон от 3 августа 2018 г. N 280-ФЗ "Об органической продукции и о внесении изменений в отдельные законодательные акты Российской Федерации"." Система "Гарант". 2018. <https://base.garant.ru/72005268/>.

The number of certified companies	0.004% of the global number (about 130 companies)	More than 0,1% of world quantity (about thousand companies) by 2035	More than 2% of the world quantity (15-20 thousand companies) by 2035
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*Source:* compiled by the author on the basis of Global Business Data Platform “Statista”:

#### Organic market in the world and Russia in 2021

Positive and even realistic scenario is possible only if there will be a restructuring of the system of financing the organic market. At the moment, the Russian market is highly dependent on the private sector (about 95% of investments come from private companies). However, the further vector of development of this market should be the development of systems of municipal-private and public-private partnerships, as well as increasing the degree of government participation (the introduction of subsidies). If Russia strives to achieve European indicators, then the principle of doing business must comply with European: investing a lot of money in the development of the sector and providing government subsidies to organic farmers.

According to the executive director of the National Organic Union (INTERFAX.RU, 2020) O. Mironenko points out that the main reason is that the law has not launched federal and regional programs of state support. There is no system for collecting information on the number of producers, certified land, market volume, etc. Not formed short-term and long-term programs for the development of domestic organic market. In the short term, this situation complicates the activities of Russian companies not only in the production sector, but also in the distribution of organic products.

The next stage will be a study of the specific features of the sellers and consumers in the Russian organic market. Certification is closely related not only to the production companies themselves and the cultivated land, but also directly to the products produced. This is due to the fact that one of the central themes of the culture of concern about nutrition is the naturalness of products and phobias about food "chemicals. Both manufacturers and retailers are focused on this demand and are expanding their product lines with different types of labeling such as "eco", "bio", "organic".

Despite the fact that the segment of organic certified products in Russia still has a long way to go before it can become a mass market, the FMCG market (Fast Moving Consumer Goods) has the necessary prerequisites for this, and most importantly the need for such products from consumers. According to NielsenIQ research (Retail Loyalty, 2021), 9 out of 10 buyers in Russia are ready to try products from the healthy lifestyle category they do not know, which is a big opportunity for manufacturers and retailers.

At the beginning of 2021 in Russia there were only 59 companies that were recognized as producers of organic products. Then the Ministry of Agriculture drew attention to the fact that the

consumer does not distinguish between the concepts of "organic", "natural", "farmer" and "bio". At the same time, only the term "organic product" has legal force. To earn such a status, the manufacturer must undergo a certification procedure, after which his product is entered in the official register of the Federal Accreditation Service. After receiving the certificate, the company can put a distinctive mark on the packaging in the form of a white sheet on a green background. Other labels, such as "bio" or "farmer's" are marketing and are not confirmed by scientific research or state expertise (Buybrand.ru, 2021).

"With increasing demand is growing and the supply: the market has already gone through a phase when the niche organic products had the status of "gimmicky" available to a limited number of buyers, "- says director of retail NielsenIQ Russia (Retail.ru, 2021). According to him, almost one in three Russians began to consume healthier food, and the results of sales analysis confirm this.

Currently, in order to develop the market of organic products in Russia, the government has decided by the end of 2021 to make certification free of charge. We believe that such a move will provide an influx of new businesses that make a bias towards the production of organic products. Separately, we also want to note the consistency of certification. Russia's refusal to accept the EU standards can also damage the image of Russian organic products. The adoption of European standards will facilitate the export of goods. However, it should be noted that the main Russian quality standard GOST 33980-2016 is entirely consistent with European standards, yet at the federal level Russia does not want to approve the consistency of certificates<sup>7</sup> (ГОСТ 33980-2016. Organic production. Production regulations, processing, labelling and implementation, 2018). This leads not only to additional financial costs, but also to transaction costs, the manufacturer will be able to save time on the process of obtaining both certifications and enter the market twice as fast, knowingly having the right to sell their products abroad.

Despite the presence of a significant number of strengths of the Russian segment of organic products (a significant excess of urban population demand for organic products over its supply in the market; consumer preference for organic products made in Russia, etc.) there are problems that hinder the development of the segment of certified products of Russian production. These problems were highlighted back in 2018 in a research paper (Krasovskaya, Deev, & Chernomorchenko, 2018) entitled "The Russian market for organic food: problems and prospects". Firstly, the focus of retailers in Russia on certified imported premium organic food products at a high price makes them inaccessible to the mass Russian consumers, who have a high demand for

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<sup>7</sup> "ГОСТ 33980-2016. Organic production. Production regulations, processing, labelling and implementation." *Электронный фонд правовых и нормативно-технических документов*. 01.01.2018 <https://docs.cntd.ru/document/1200141713>.

this type of products. Secondly, the Russian market sells a large proportion of adulterated products of both imported and domestic origin also due to the lack of a federal law that would regulate the labeling and certification of organic food. Thirdly, due to the underdevelopment of the domestic market, a significant demand of the Russian mass consumer is largely satisfied by non-certified organic products of farmers and private farms of domestic production, the quality of which has no official confirmation. Fourthly, the growth of the Russian segment of the domestic market of organic products is constrained by the lack of development of environmental culture and awareness among the urban population of the country. Russians do not know, do not understand or do not attach importance to the health hazards of eating products with GMOs, artificial additives and flavor enhancers, palm oil, etc., and they do not know what products are organic.

According to the scientific and analytical review "Organic agriculture: innovative technologies, experience, prospects" (Korshunov, et al., 2019), compiled by S.A. Korshunov, A.A. Lyubovedskaya with the help of A.M. Asaturova, V.Y. Ismailova, A.A. Manokhina and A.Kh. Zanirova expected the following projected effects of the development of organic agriculture at the national and local levels: separation of the production of organic products from the production of non-organic products; introduction of a ban on the use of agrochemicals, pesticides, antibiotics, growth and fattening of animals, hormones, with the exception of those that are permitted for use in the Russian Federation existing national, interstate and international standards in the field of organic production; use of means of biological origin to control pests, diseases of plants and animals, and implementation of measures to prevent losses caused by pests to plants or plant products, which are based on the protection of entomophages (natural enemies of plant pests), the choice of plant species and varieties, selection of crop rotation, optimal methods of plant cultivation and methods of heat treatment of organic products; use of food additives, technological aids, flavorings, flavor enhancers, enzyme preparations, trace elements, vitamins, amino acids, provided by national, interstate and international standards operating in the Russian Federation in the production of organic products.

Covering the transition of companies to the production and sale of organic products is closely related to press information, public relations and event marketing. Thus, in his study of "Trends in the Russian market of organic products" (Chekha, 2021) A.F. Chekha notes that the increased demand of Russian citizens for products of the category "organic" is reflected in the volume of representation of companies' products at such events as the exhibition of organic products "BioFach". It is worth noting that at the "BioFach 2019", which was held in Germany in February 2019. The exhibition was attended by 9 Russian companies-producers of organic products, and already at "BioFach 2020" was attended by 12 Russian companies. Moreover, there

was great interest in these products, because now consumers not only in Russia, but also abroad know that Russian organics is legalized and regulated at the federal level.

Thus, the Russian market of organic agri-food products is currently in its infancy. A significant contribution to its development was made by the law "On Organic Products", which should be considered the institutional basis for the development of this segment. However, for its stable development it is necessary to form at the state level a marketing strategy for the development of the market of organic agri-food products. This strategy should form the conditions for the development of a competitive environment for this segment of producers. In particular, to form clear rules of product certification (Agroinvestor, 2017). It is also necessary to promote the brand of organic products among consumers, explanatory work on the benefits of these products. Finally, the marketing strategy for the development of the market of organic agri-food products should be focused on the development of foreign markets, and the export of finished products with maximum margins.

Eco-marketing is a complex of marketing actions of positioning goods as Eco, Bio, Organic products. The main tool used is eco-labeling - special graphic symbols or text on the packaging of goods, confirming compliance with environmental safety standards for the environment and the consumer. Manufacturers and sellers, catching the increased demand for these products, began to offer solutions: glue their "eco-labels", change the design of packages, and only a few check their products. In order not to make the wrong choice and not to encounter a fake, consumers go to specialized stores or look for departments of eco products in retail chains. V.V.Bakharev et al. in their paper "Ecologization of retail: an analysis of strategies" (Bakharev, Kapustina, Mityashin, & Katrashova, 2020) point out that a striking example in the market is "Vkusville", which initially staked on the sale of "healthy food". Having started in 2009 with the first store in Moscow, they have grown to 600 stores across Russia and still remain one of the fastest growing retail chains in the country.

As a rule, the consumer is completely in the dark. This particular green leaf or picture on the label says absolutely nothing. Manufacturers often unreasonably "mold" their "quality labels" themselves, thereby undermining consumer confidence in this marketing tool in principle: "It's all a marketing ploy, just stickers." According to the data of marketing research agency "All-market.info" (NewRetail, 2018) 45% of Russian enterprises practice greenwashing as mentioned above. Entrepreneurs use this new type of marketing with caution. First of all, they consider the potential income and costs.

All of the above also indicates the formation of a "false" competitive advantage, with the consequent risk of violating the rule of "fair market competition. In contrast, in the U.S., 79% of companies strongly agreed that providing environmentally friendly products and services gives

their business a competitive advantage. Additionally, 89% report that the eco products they offer are at least as profitable as alternative offerings, with 31% indicating that green products and services are more profitable. As a result, 75% of respondents said they plan to expand their portfolio of green products and services in the near future (NewRetail, 2018).

Studying the study of the Russian market of organic products, conducted by experts of Interfax, it can be noted that it was the adoption of the law on organic production allowed to convey to consumers the usefulness of the product, and those who did not know about organics, helped to learn what an organic product is<sup>8</sup>.

Thus, the popularization of organic products in the Russian market should be "tied" simultaneously to the regulatory framework and certification, and on the modification of the concept of environmental marketing based on truthful and complete information. Even though National Organic Union is trying to offer their assistance to the state in developing a properly functioning future legislation of the relationship between producers, processors, certifiers and regulatory agencies, these attempts have not yet led to anything (National Organic Union, 2021).

Key areas of improvement in this sector are: the formation of an algorithm of mutually beneficial interaction between the private and public sector (in matters of investment and budget financing of subjects of the organic market), replenishment of the regulatory framework governing the activities of companies in the organic market, optimizing the certification of land and companies-producers (the first step has already been made - introduced a federal law on organic products (2018) and free certification (2021). It is also worth considering building partnerships and exporting Russian organic products to markets in China, Japan, UAE and even the United States.

#### **1.4 Key aspects of marketing promotion of organic products**

The purpose of this paragraph is to study and systematize the key aspects of marketing promotion of organic products and their impact on consumer behavior. We have studied the specifics of promoting organic products in order to study the consumers' opinions and develop recommendations in the second chapter of this work.

The concept of ecological marketing which is a part of social and ethic marketing is rather new but is already gaining momentum in the world market. This type of marketing gives an opportunity to think over and design the structure of measures for survival in the business space

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<sup>8</sup> "Федеральный закон от 3 августа 2018 г. N 280-ФЗ "Об органической продукции и о внесении изменений в отдельные законодательные акты Российской Федерации"." Система "Гарант". 2018. <https://base.garant.ru/72005268/>.



in the conditions of universal aspiration of the market to create ecologically pure natural environment. Firms that implement the concept of environmental marketing advertise their goods and services in terms of their harmlessness and usefulness. Their business philosophy is to cause as little harm to the environment as possible in the production, distribution, consumption, recycling and further disposal of goods. To realize this idea, new wasteless and safe production technologies are developed, eco-products and services are developed, reciprocal communication with consumers of environmentally friendly products is created, marketing innovations in eco-marketing are supported, aimed at changing the culture of production and consumption (Belyakov, Eirikh, & Stepina, 2020).

One of the common challenges of the market is to increase consumer awareness and systematize the field of labeling. The existing system, according to experts, is not optimal: it has more than 2,000 labeling variants; there is no body that is authorized to control the quality of products in the Single Register of registered voluntary certification systems (Rosstandart). However, the expressed demand for the state to introduce order there is a risk of excessive regulation.

Unfortunately, not all trends in the organic market are purely positive. There is a hypothesis that the growth of this market creates the conditions for a "new wave" of social inequality. Organic production costs more and, in principle, is not capable of providing for the majority of the world's population. And this raises two ethical questions. The first concerns the relevance of the concern for improving ecological characteristics at a time when world hunger is not completely solved and the diet of the inhabitants of certain countries lacks protein. The second relates to a new dimension of social inequality. As the value of sustainability grows, the definition of the elitist changes. Rare imported goods are being replaced by organic, local ones. The rarer stuff has to cost more, but when the rarer stuff turns out to be less harmful, it adds social urgency to the issue. At the same time, almost a third of Russians do not trust the information about the products from the producer. The market is facing an acute problem of consumer distrust of labeling, fueled by popular investigations and control purchases.

However, the executive director of the National Organic Union, Oleg Mironenko (RIA News, 2022), argues that the "gap" between the prices of organic and non-organic products by the end of 2021 significantly decreased. If in the period from 2013 to 2014 the cost of organics exceeded the cost of "conventional" products in 2-3 times, now the difference in price is on average 42.5% (variability from 25 to 60%). But we should not forget that at the moment, according to Rosstat (RBK, 2021), the real disposable income decreased by almost 4%, which with the risk of increasing the inflation rate to 9% (December 2021 - 8.39%) and rising consumer prices, will lead to the fact that this category of products will remain inaccessible to certain categories of citizens.

Society has accumulated a significant inertia of distrust in general of institutions, standards, control, and given the higher cost of products labeled "organic," some consumers see it as a marketing gimmick. Increased confidence in the quality of labeled products and in label compliance controls is an important challenge for all market participants. It can be assumed that as interest in the quality characteristics of products grows, the value of trust will only increase (Vedomosti, 2020). In this situation, the system of marketing communications between producers and consumers comes into play. Again, we are talking about real green (eco) marketing.

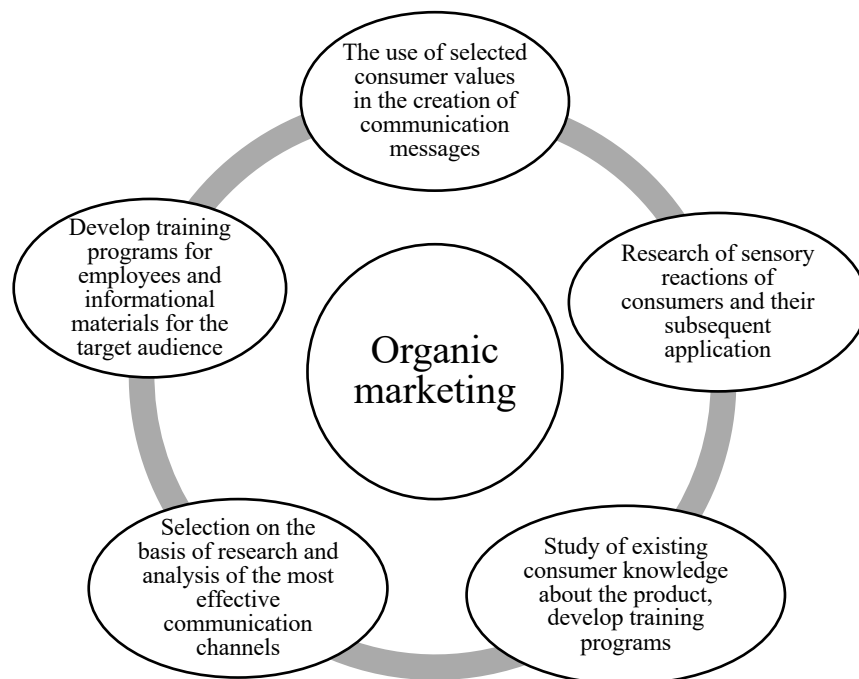
When forming a marketing strategy for the promotion of organic products, special attention should be paid to consumer stereotypes and purchasing power of the target audience. A.Kh. Tambiev notes that Russia has great opportunities for growing organic fruits and vegetables due to the large amount of free arable land, potentially suitable for such production (Tambiev, 2019). However, it should be understood that agricultural production is primarily a business, the main purpose of which is to make a profit. When growing organic products significantly reduces yield and gross yield, which increases its cost. All these costs should be offset by the high wholesale value of bio-products and significant demand for them from buyers, which is not yet observed in the market due to the low purchasing power of most of the population.

The potential for domestic consumption of organic products is estimated by some experts at 4-5 billion euros. However, an important role will be played by the price on the shelf. If the participants of this segment of the agricultural market can achieve a small difference in the cost of organic and non-organic products, as, for example, in Finland, where it is, in particular, for milk is about 15%, then a significant proportion of the urban population will buy organic products.

However, if this figure will be more than 30%, the purchasing audience will sharply decrease. But nevertheless 10% of the population will still buy an organic product, which will be more expensive than conventional, even at 50-70%. In the current situation, when the price difference between organic and conventional products is on average from 100 to 200%, buying organic will be able to less than 1% of the population, and it will be available only to the elite (this consumer stereotype is still valid).

Domestic agricultural products with organic status are able to distance themselves from cheap, low-quality imported food and due to the quality to be competitive in the WTO. After the adoption of adequate laws and standards, within 5 years Russia could take 10-15% of the world market of organic agricultural products. In socio-economic terms - it is more than 15000 certified producers of organic agricultural products, about 1000000 new jobs created in rural areas. Promotion of organic products for export can go in two main directions: in the EAEC countries and Europe. For active access to the European market, it is necessary to resolve the issue of mutual recognition of existing standards.

In the work "Marketing of organic products" (Sakhno, 2019) confirms the hypothesis that eco-marketing, like "classic" marketing should be a multi-element system consisting of a set of interrelated principles (*Figure 7*).



*Figure 7 General principles of organic marketing*

*Source:* compiled by the author on the basis of K.A. Sakhno Marketing of organic products // Bulletin of the Kharkov National Technical University of Agriculture named after Peter the Great

It is necessary to take into account the possible dual role of marketing communications. Indeed, on the one hand, ecological advertising is a type of social advertising, on the other hand, advertising of environmentally-oriented products, should emphasize the environmental benefits of the firm, its products or services. In either case, communication channels should maximally reach different target audiences, be environmentally acceptable, and, if possible, perform a certain social function.

Yu.B. Kostrova in her work "Formation and development of the market of organic products" (Kostrova, 2020) emphasizes the fact that the people in Russia still do not have sufficient knowledge in the field of organic products, which is something new to him and with which he is just beginning his acquaintance. Such ignorance of consumers allows unscrupulous advertisers to deceive their customers with such a phenomenon as greenwashing. The term greenwashing itself suggests tricks and tricks of producers in order to confuse consumers in order to present their product or brand as organic, environmentally friendly, when it is not. This is done in order to increase interest and demand, as the fashion for organic products is growing every day. This "green camouflage" undermines the reputation of certified organic products whose production actually

complies with all regulations, making it even more difficult for them to firmly establish themselves in the market (Menno, Huluba, & Beldad, 2019).

To combat such a method as greenwashing, it is necessary at least to increase consumer awareness, as well as to establish the mandatory passage of independent certification. Adoption of the necessary legislative framework in Russia in this case will be a kind of protection for the consumer and should exclude from the practice of this widespread method in the country. The importance of product quality for the consumer is, for the most part, that the largest percentage of consumers in Russia are health-conscious families, especially children, housewives. For example, about 40% of consumers are motivated by maintaining the health of their family and friends. The second place is shared by people forced to follow a certain type of diet prescribed by doctors, and those who buy organic products because of the "prestigious status" dictated by advertisers, which have such products. Next comes the segment of consumers who practice a healthy lifestyle for its own sake and of their own free will. The income level of the Russian population is one of the main reasons for the poor development of the market. This also includes consumer ignorance and the lack of a legal framework to deter unscrupulous producers (only one international standard for organic products and the recently introduced Federal Law) (Kostrova, 2020).

According to A. Teslenko, an expert at the Mildberry branding agency, health benefits and naturalness are the basic positioning of most organic brands. It has its own visual codes: a lot of white and/or green, kraft paper made of lightly waxed long fiber pulp and reminiscent of packaging from old shops in the early 21st century, a large image of unprocessed foods, green stamps, lists of "without" and "only. Simply buying a product in such packaging makes a person feel healthier.

Despite the wide range of real and perceived benefits that organic products give buyers, the main deterrent to the market remains the high price. Here come into the arena of organic proprietary brands. As an example, attempts to develop their own brand "Globus Vita" (a line of farm and organic products) by the network "Globus" (Retail.ru, 2018).

Evolution of marketing of organics can be represented schematically (see *Figure 8*).

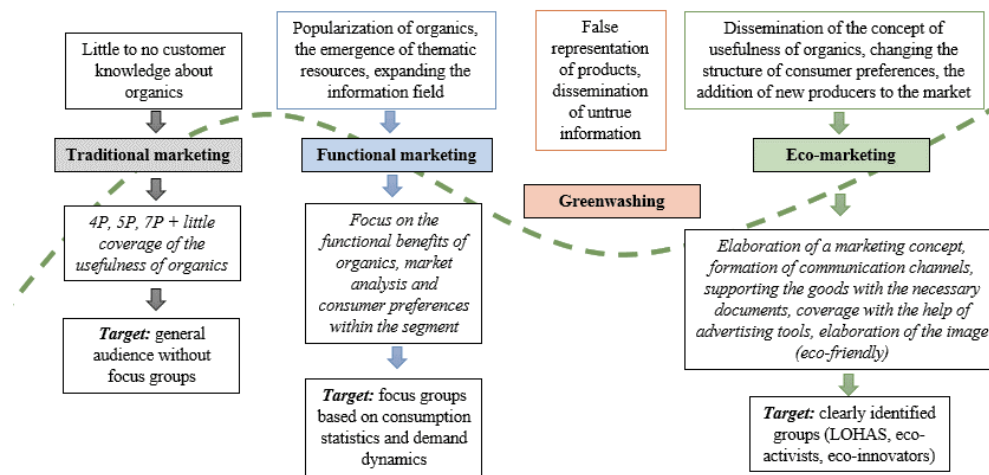


Figure 8 Evolution of marketing of organics

Source: compiled by the author

In addition to the personal benefit for themselves and their families (health benefits, safety, taste and nutritional value) organic products have a deeper social and emotional side. According to a global study of organic consumers published in *The Journal of Consumer Behavior*, people who regularly and consciously buy organic are characterized by a certain set of values and lifestyle. There is an acronym LOHAS to describe this lifestyle - lifestyles of health and sustainability (Marketing Schools, 2020).

Marketing everywhere is becoming more honest and transparent - this is a forced measure in the digital age. And in the organic category, transparency and openness are especially important.

How to use it: just don't cheat, ever. LOHAS are attentive, incisive, read the fine print (especially his) and smell "greenwashing" a mile away. As heavy users of search browsers, they do a good job of doing their homework to find information about the brand and its products. Tell them how you make your products and why that is, offer to participate in their creation, and don't be afraid of long texts and complicated meanings. It makes sense to choose methods to further differentiate organic brands such as "gluten free", "vegan", "free range", "local source", "raw" (Mildberry, 2021).

You should not turn the social responsibility of the company in social advertising. The product should remain tasty, the packaging should be beautiful and comfortable, and the communication should be inspiring. The marketing of organic products should not be confused with protests against animal cruelty or the release of harmful substances into the air.

Thus, marketing of organic products should be nothing more than a combination of methods and tools of classical marketing with highly specialized principles targeting organic consumers. In matters of promotion of organics - honesty and transparency of communication of

producers with consumers plays a huge role by virtue of the formation of consumer preferences, stereotypes, the degree of commitment and loyalty.

The frequency of the phenomenon of greenwashing among Russian companies indicates that the desire to receive financial benefits from the implementation of activities is currently in the first place for producers. This fact hinders the development of the organic market, because in conditions of ambiguity and complexity of consumer navigation in this market, the false information provided only further confuse consumers. Unfortunately, many companies have learned to successfully "circumvent" the rules and established standards for marketing activities. That is why the system of marketing communications and promotion of organic products to be formed on the basis of tightened (or at least supplemented) regulatory and legal acts, as well as coupled with the desire of the manufacturer to participate in improving the quality of life of the population.

### 1.5 Hypotheses

System is a set of elements that are in relationships and connections with each other, forming a set, unity. After conducting a desk study, it can immediately be noticed the trend that has arisen in the consumption of organic products in connection with coronavirus infection both around the world and in Russia. However, if turn to the study of factors influencing consumer choice after the impact of coronavirus infection, most of the studies were conducted on foreign markets (especially in European countries). This raises the main research question of the study: What factors influence the choice of consumers when choosing organic products in Russia? After literature review and deep analysis of various studies concerning changes in the factors influencing organic product purchase decision list of hypotheses was developed for further testing (Table 8).

*Table 8. List of hypotheses and research questions*

№	Hypotheses	Description/ Quotes	Page
1	Consumers learned more about organic products during the COVID-19 pandemic	During the COVID-19 pandemic, there was a growing interest of Russian consumers in organic products. There may be several reasons for this - from obtaining useful information and the formation of a desire to "be on trend" to the desire to maximize the level of care for their own health.  The COVID-19 pandemic has strengthened this trend - over the past six months, Russian citizens have begun to attach greater importance to a	19, 20

		healthy lifestyle (one in four respondents are interested in healthy eating, 25%).	
2	Consumers used to buy organic products in specialty stores before COVID-19 pandemic, and now they purchase these products in regular grocery stores or order online	Research suggests an increase in online purchases (FMCG). Today, the popularity of online services has peaked, shoppers are signaling new needs, hygiene and health concerns have reached new levels, and quality is moving up the list of product choice factors.	19
3	The reasons for the consumption of organic products relative to the income level are different: for "low income" – organic products are a fashion, and for "above middle" - health care	<p>The consumption of organic products goes beyond the standard concern for their health.</p> <p>The actions of health-oriented consumers are reinforced because of their perception that such food is environment as well as animal friendly and delivers higher nutritional and natural content than food grown through conventional means. These positive aspects of organic food represent the internal state of consumers regarding the facilitators (EW, NTC, and NC).</p> <p>The belief in obtaining health-related benefits is the primary determinant in the choice/consumption of organic products. Environmental impact is the second most important attribute on the purchase process, but nearly half of health issues.</p> <p>As in the reviewed studies of consumer behavior in the organic markets in Australia, Japan and Spain, for Russian consumers the top three factors in making a decision in favor of buying organic are: health (including nutritional factors), safety (including production, raw materials), care for the environment.</p>	12, 13, 18, 25
4	Before the COVID-19 pandemic, consumers consumed organic products less	<p>The same logic as in the first hypotheses.</p> <p>We can conclude that on the one hand - during the pandemic, the level of awareness of real and potential consumers of organic products significantly increased, which in turn led to a</p>	25

	frequently than they currently do	rationalization of demand for organics through the minimization of chaotic acquisitions regardless of the "transparency" of the manufacturing company, the availability of documented characteristics of the product and determine its real useful properties (subjective for each individual consumer).	
5	The crisis doesn't have an influence on the consumption of organic products	As we found out, the purchase of organic products is influenced by various factors, including income. The influence of political and economic factors affects the purchasing power, so it is important to study the opinion of a real consumer.	27
6	Before the COVID-19 pandemic, the consumption of organic products was associated with the fashion factor, but after the pandemic, people began to worry more about their health and the environment, so they switched to organic	The term greenwashing itself suggests tricks and tricks of producers in order to confuse consumers in order to present their product or brand as organic, environmentally friendly, when it is not. This is done in order to increase interest and demand, as the fashion for organic products is growing every day. Also, we found connect with eco-style and organic products (almost one in three Russians began to consume healthier food, and the results of sales analysis confirm this).	29, 36
7	Low-income consumers tend to focus on hard factors, middle-income consumers tend to focus on hard and medium factors, above middle-income consumers tend to focus on hard, medium and soft factors	In the literature review, we saw the relationship between price and quality of products (high price and low product availability, however, could be perceived as a signal of quality and high value of the product. The view that organic food is tasty also emerged, although sensory features are probably not the main motivation for purchase. This peculiarity also causes the possibility of another consumer stereotype that organic is only for certain social classes with incomes above average.) As a key (and virtually the only) barrier to purchase is the price, which can be supplemented	24



		by the overall availability in terms of territorial unevenness in the distribution of organic producers, the lack of distribution points, etc.	
8	Consumers attribute the factors of promotion, accessibility in stores and domestic production to soft factors and the factor self-belonging to organic to medium factors	Quite interesting is the factor of increasing the degree of significance of the presence of distinctive signs on products, which once again points to the hypothesis that this type of labeling and certification can have a positive impact on lowering the risk barrier and the use barrier.	24
9	Before the COVID-19 pandemic, consumers mostly paid attention to hard factors that influenced the decision to buy organic products	We saw the difference in choice of factors in different periods regarding Covid19, so it was decided to study the attitude of people.	23 (fig. 4)
10	In organic products promoting, it is important to give consumers knowledge about the specifics of organic brands in Russia in order to avoid negative consumer experience associated with greenwashing	Organic products are a specific product, which is partly formed due to trends and marketing. Therefore, its promotion should be nothing more than a combination of methods and tools of classical marketing with highly specialized principles targeting organic consumers. In matters of promotion of organics - honesty and transparency of communication of producers with consumers plays a huge role by virtue of the formation of consumer preferences, stereotypes, the degree of commitment and loyalty.  The creation of a consumer information system, not only covering the key aspects of the production and sale of organic products, but also understandable for the "ordinary" consumer may well be seen as an essential step in the development of the Russian market of organic products.	18, 37

Thus, based on the literature review, we have identified key trends, as well as factors that have different effects on Covid19. In the next chapter, we will take a closer look at these positions in the framework of qualitative and quantitative research.

## CHAPTER 2. CHANGES IN CONSUMERS' ORGANIC PRODUCT PURCHASE DECISIONS: RESULTS OF EMPIRICAL ANALYSIS

### 2.1 Mixed Research Design

In the previous chapter, an analysis of secondary information was carried out. It is possible to clearly distinguish four areas of topics: factors that generally affect the choice of consumers of organic products, the role of the coronavirus pandemic in relation to factors influencing the choice to buy organic products, the specifics of the promotion of organic products and the market of organic products in Russia. After conducting a desk study, it can immediately be noticed the trend that has arisen in the consumption of organic products in connection with coronavirus infection both around the world and in Russia. However, if turn to the study of factors influencing consumer choice after the impact of coronavirus infection, it can be seen that most of the studies were conducted on foreign markets (especially in European countries). This raises the main research question of the study: What factors influence the choice of consumers when choosing organic products in Russia?

In order to further develop the design and methodology for Mixed Methods Research, it is necessary to formulate a common goal of the study, define objectives, and develop a comparative basis for the research methods used in this study.

However, it is important to note that the study will be conducted according to the scheme Preliminary Qualitative Inputs to Core Quantitative Research Projects (Figure 9). This is due to the fact that in this work it is important to increase the effectiveness of quantitative research. A preliminary qualitative study will help to find out how the respondents' attitude to organic products has changed, to compile a questionnaire for a quantitative study more accurately (Morgan, 2014).

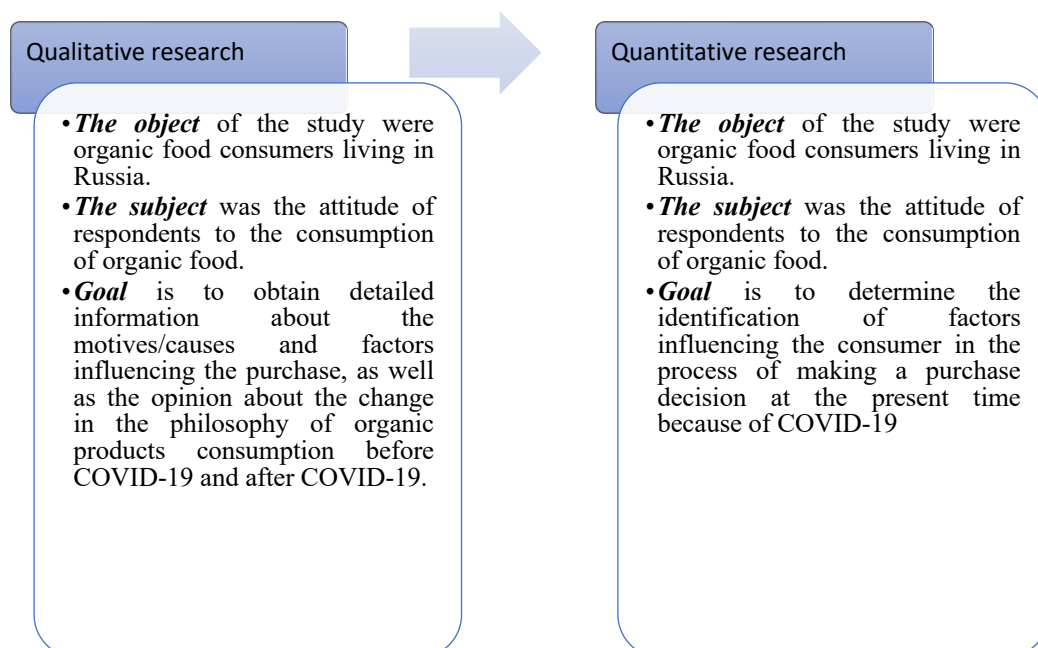


Figure 9. Scheme of Mixed Methods Research

Thus, the general goal of the study is to create the system of factors influencing consumer preferences regarding the choice of organic products on the Russian market.

**The object:**

Consumer preferences regarding the choice of organic products on the Russian market.

**The subject:**

The structure of preferences and factors of choosing organic products.

To achieve this goal, it is necessary to solve the following objectives:

1. To develop a research design and formulate a basis for further interpretation of preferences and factors of choosing organic products by consumers.
  - what does the general portrait of the consumer of organic products look like;
  - how often does a consumer acquire organic products;
  - which categories of goods are the most and least popular on the organic product market, which factors and motives influence the consumer in the decision-making process about buying organic products: hard factors (health benefits, environmental impact, animal welfare, production practices, nutritional value, availability, absence of GMOs and price), medium factors (safety, quality, appearance, origin, certification warranty (EU logo) and expectation of better taste) and soft factors (freshness and more natural appearance);
  - what are the preferred ways to buy organic products (pickup, courier, etc.).
2. Conduct qualitative research through a series of 3 focus groups.
3. Conduct a quantitative study through an online survey (at least 300-person sample).
4. Processing and analysis of the obtained results.

### **2.1.1 A series of focus groups: methodology and findings**

#### ***The goal, objectives and research questions of qualitative research***

Based on the above general goal of the study, the goal of qualitative research can be formulated: to study the impact of Covid-19 pandemic on the factors of consumption of organic products by consumers, to identify their opinions on changes in the philosophy of consumption of organic products in the pre-COVID, COVID and post-COVID periods.

In the previous chapter, factors were studied and classified into hard factors (health benefits, environmental impact, animal welfare, production practices, nutritional value, availability, absence of GMOs and price), medium factors (safety, quality, appearance, origin, certification warranty (EU logo) and expectation of better taste) and soft factors (freshness and

more natural appearance). In a qualitative study, it is important to check already existing factors, as well as supplement the study with new factors.

Therefore, it is necessary to solve the following objectives:

1. To survey respondents who are existing consumers of organic products, but have different income levels (low, middle, above middle).
2. To determine the level of awareness and attitude of consumers regarding organic products with the help of qualitative research.
3. To identify the main reasons (motives) for the consumption of organic products by consumers before the COVID-19 pandemic.
4. To determine the impact of the pandemic on consumer preferences regarding organic products.
5. To determine the impact of the crisis on consumer preferences regarding organic products.
6. To check the existing factors influencing consumer decision to buy organic products and put forward new factors that have not been studied before.
7. To identify the main factors influencing consumers decision to buy organic products at the present time.
8. To analyze and interpret the results obtained.

The following Research questions (RQ) have been put forward for this study:

1. Consumers learned more about organic products during the COVID-19 pandemic.
2. Consumers used to buy organic products in specialty stores before COVID-19 pandemic, and now they purchase these products in regular grocery stores or order online.
3. The reasons for the consumption of organic products relative to the income level are different: for «low income» – organic products are a fashion, and for «above middle» - health care.
4. Before the COVID-19 pandemic, consumers consumed organic products less frequently than they currently do.
5. The crisis doesn't have an influence on the consumption of organic products.
6. Before the COVID-19 pandemic, the consumption of organic products was associated with the fashion factor, but after the pandemic, people began to worry more about their health and the environment, so they switched to organic.
7. Low-income consumers tend to focus on hard factors, middle-income consumers tend to focus on hard and middle factors, consumers with above-middle income tend to focus on hard, middle and soft factors.

8. Consumers attribute the factors of *promotion, accessibility in stores and domestic production* to soft factors and the factor *self-belonging to organic* to medium factors.
9. Before the COVID-19 pandemic, consumers mostly paid attention to hard factors that influenced the decision to buy organic products.
10. In organic products promoting, it is important to give consumers knowledge about the specifics of organic brands in Russia in order to avoid negative consumer experience associated with greenwashing.

### ***Rationale of the method of collecting primary information (a series of focus groups)***

Then the method of collecting primary information a focus group will be substantiate. A focus group is a group conversation between respondents (on average 6-8 people) and a moderator. This method is popular not only among Russian researchers, but also around the world. For a competent result, it is important to follow the rules that the moderator announces before the start of focus groups (M.D., 2020). This is primarily due to the fact that in the context of a focus group, respondents participate in a group discussion, which means that participants are more likely to express and discuss different points of view. The purpose of this study is, first of all, to obtain detailed information about the motives/ causes and factors influencing the purchase, as well as the personal opinion about the change in the philosophy of organic products consumption in the pre-COVID, COVID and post-COVID periods. In this regard, the focus group method will allow respondents to supplement each other's answers, which will lead to a wider coverage of these issues.

Statistics Canada conducted a study «Focus Groups with Respondents and Non-Respondents to the Survey of Consumer Finances» (Staisey, 2008), which investigated the dependence of respondents' answers to questions related to finance. The study showed that questions related to any financial activity of the respondent are perceived too probing. In addition, respondents tend to embellish their income (by an average of 20-25%), because they do not want to feel either low or high income. It is important to note that the study showed that it is more comfortable for respondents if the income range is indicated or if the focus group participants are selected in accordance with the same income range. The focus group will facilitate contact and interaction between the participants. As illustrated in the article «Importance of Focus Groups in Qualitative Research» (Gundumogula, 2020), the data obtained as a result of a focus group is deeper and richer than those obtained as a result of an interview.

In this research there will be 3 focus groups, which will be divided by income level. According to Rosstat (Rosstat, Monetary income and expenses of the population, 2021), in Russia

the population is divided by income into 8 groups: extreme poverty (income no more than 7-8 thousand rubles), poverty (8-12 thousand rubles), poverty (12-20 thousand rubles), above poverty (20-30 thousand rubles), average wealth (30-60 thousand rubles), wealthy (60-90 thousand rubles), rich (90-100 thousand rubles), super-rich (income over 150 thousand rubles). In focus groups, respondents will be divided into three. The first focus group (low income): extreme poverty, poverty, poverty, above poverty, the second focus group (middle income): middle income, the third focus group (above middle): wealthy, rich, super-rich.

***Sample description (segment characteristics, number of respondents)***

The sample of a series of focus groups included 21 respondents who represent organic products consumers. According to The Center for the Study of Consumer Behavior of the Russian Quality System (RosKachestvo, 2021) the most percentage of consumers of organic products are people at the age of 18 to 34 years old, they live in cities with a population of more than 100,000 citizens. This was the criterion for selecting respondents for the focus group. In total, 3 focus groups were conducted with existing consumers of organic products, of which: 7 respondents with low income, 7 respondents with average income, 7 respondents with above-average income. In addition, the sample included consumers of different ages: from 18 to 33 and living in different cities of the Russian Federation. It is worth noting that the number of males in focus groups is greater than women. This is due to the fact that the center of the study claims that men are more likely to purchase organic products (6% more often than women). In this study, respondents were divided by gender in relation to 5.2:4.8 (men: women).

***Detailed description of the characteristics of the respondents involved in a series of focus groups***

In total, 21 people took part in the focus group: 10 female, 11 male. The following are the main characteristics of the respondents (mini-biographies). As mentioned earlier, focus groups were divided by income level. A detailed description (biographies) of the respondents can be found in Appendix 1, where their experience of consuming organic products is illustrated.

The first focus group was held on April 4, 2022 at 19:00. It was attended by respondents with low income (up to 30,000 rubles):

*Table 9. Respondents of first focus group*

Respondents of first focus group	Description
1. Daria	25 years old, lives in Yaroslavl. She is an author of scientific works in the field of philology. Daria's main motive for consuming organic products is «The desire to

	reduce the number of harmful additives consumed in food, used on skin, nails, hair».
2. Arina	23 years old, lives in St. Petersburg. She is studying for a master's degree at St. Petersburg University of Economics in the 1st year in the specialty Project Management. Arina buys organic products because she likes the composition, and likes how she feels when she consumes organic
3. Anastasia	23 years old. Lives in St. Petersburg. Works at the airport as a medical service specialist. The main motive for the consumption of organic products is utility.
4. Andrey	18 years old. Lives in Kaliningrad. Andrey is a student and studying journalism at the Baltic Federal University. At the time of COVID-19, he began to eat more dietary and balanced foods, as well as devote himself to sports every morning («When quarantine began, I ate a lot of junk food. When I decided to put my diet in order, I started cooking and organic products are great for this»).
5. Andrey	26 years old. Lives in Nizhny Novgorod. Works as a salesman in a sporting goods store. However, Andrey noticed that due to the pandemic, he began to take more care of his health, which influenced his desire to eat organic goods.
6. Mikhail	20 years old. Lives in St. Petersburg. He is studying at the Pedagogical University as a teacher of history and social studies. He started buying organics when he moved out from my parents and started earning money on my own.
7. Albina	23 years old. Lives in St. Petersburg. She is a student of the Military Medical Academy S.M. Kirov. She has been a consumer of organic products for more than a year, because «the pandemic has shown that a lot depends on the diet in our lives, including the state of health».

The second focus group was held on April 5, 2022, at 19:00. The income of respondents in the focus group ranges from 30,000 to 60,000 rubles.

*Table 10. Respondents of second focus group*

Respondents of second focus group	Description
1. Dmitry	25 years old. Lives in St. Petersburg. Works as a sales manager. In his free time, he likes to shoot and taste alcoholic beverages. According to Dmitry, the pandemic did not give significant changes in his life. «What used to be remote computer work, what is now. »



2. Ivan	24 years old. Lives in St. Petersburg. He is studying at ITMO for a master's degree in the 2nd year in the specialty Digital Humanities. He became interested in organic products before the pandemic (a friend introduced him to organic products), but during COVID-19 he began to learn more about organic production and began to buy organic more often.
3. Margarita	24 years old. Lives in Moscow. Works as an administrator in a gym. She uses organic products all her life, because «it is useful and plays an important role in the life of any person».
4. Arseniy	29 years old. Lives in St. Petersburg. Works in the volunteer center as an event organizer. He began to consume organics around the time of the pandemic, as he began to care about the issue of health and was frightened by the statistics of mortality from COVID-19.
5. Daria	33 years old. Lives in Moscow. Works as an art critic. The pandemic, according to Daria, has not changed her life.
6. Alina	22 years old. Lives in St. Petersburg. She studies journalism at RANEPА and earns a part-time job on the radio. Thanks to COVID-19, she began to pay more attention to her health: going to yoga, eating a balanced diet, and therefore began to consume organics during COVID.
7. Mikhail	27 years old. Lives in St. Petersburg. Works as a librarian. He has been using organic products since childhood. «I like it when the product is what nature intended it to be, when it does not change artificially, but remains real»

The third focus group was held on April 7, 2022, at 19:00. The respondents' income level is from 60,000 rubles and above.

*Table 11. Respondents of third focus group*

Respondents of third focus group	Description
1. Artemiy	24 years old. Lives in St. Petersburg. Works as a sales manager. He started consuming organic products even before the pandemic «I have been a consumer of products for a long time» and buys it every day.
2. Alexandra	29 years old. Lives in St. Petersburg. She works as a specialist in the educational department of an educational institution. Alexandra got acquainted with organic

	products 2 years ago during the COVID-19 epidemic and started eating them «because they do not contain chemicals and have great health benefits».
3. Vladimir	25 years old. Lives in St. Petersburg. The main source of income is training in the management of sailing yachts. Consumes organic matter «to the same extent as ordinary».
4. Anatoly	34 years old. Lives in St. Petersburg. Military. Anatoly has been consuming organic goods for a long time, but he thought they were just farm products.
5. Elizabeth	24 years old. Lives in Yekaterinburg. Elizaveta is an individual entrepreneur, provides copywriter services. The pandemic played a significant role for Elizabeth for organic consumption: «During self-isolation, I was looking for delicious and healthy food for myself to save time on cooking, so I tested different companies. Just at this time, environmental issues became more concerned, so I decided to give more preference to organic.
6. Anna	33 years old. Lives in Moscow. She is a manager by education but has mastered web design and has been creating design for companies for 7 years. Anna has been using organics for a long time because she monitors her nutrition especially after the birth of her daughter.
7. Alexey	27 years old. Lives in St. Petersburg. Works as an Internet promotion manager. He started using organic products 4 years ago, «to minimize the harm from living in a big city, I believe that this will help me stay healthy longer».

### ***Description of the place, time of the research, equipment, and auxiliary materials***

A series of focus groups was conducted using modern information technology (video conferencing «Zoom»). This method of communication with respondents was chosen for the following reasons:

1. Distance communication with respondents in the epidemiological situation associated with the COVID-19 pandemic.
2. The opportunity for respondents to participate in the focus group in comfortable conditions (home, office, etc.), which can positively affect the results of the focus group.

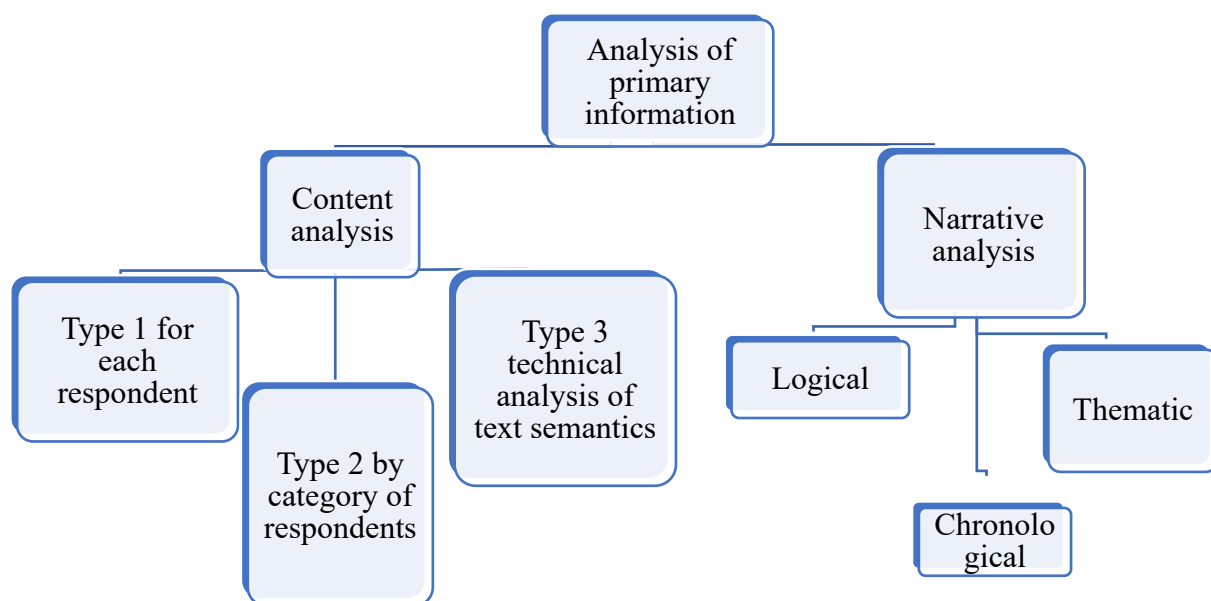
Focus groups were held over 3 working days: April 4, 5 and 6, 2022. Each focus group was held at 19:00, when it was convenient for each respondent to take time to participate in the focus group. In order to conduct a series of focus groups, the licensed program «Zoom» was used, which is a video telephony service for registered participants. In addition, a laptop/smartphone/tablet with a webcam and microphone were used. The focus group was recorded using the «Screen Recording» function, which was later converted into a transcript for further analysis.

### ***Developing a focus group scenario***

For the purpose to conduct a semi-structured conversation with the respondents, a detailed scenario was drawn up, which includes a block with general questions, as well as questions that cover the topic of the study. The scenario is located in Appendix 2

### ***Results of qualitative research***

The information obtained as a result of field research should be structured for further processing. To achieve this goal, several methods will be used: content analysis and narrative analysis. A more detailed structure of the methodology for interpreting primary information is presented in *Figure 10*.



*Figure 10 Structure of the methodology for interpreting primary information*

*Source:* compiled by the author

The content analysis of the first type includes a summary of the answers of a particular respondent to the main questions of the scenario about the study. This content analysis is demonstrated in Appendix 3.1 (low income), Appendix 3.2 (middle income) and Appendix 3.3 (above middle income).

Appendix 3 presents respondents' answers to the main questions of the focus group scenario: life changes due to covid-19, reasons for organic consumption, the beginning of organic consumption, distribution channels before and after the pandemic, the effects of the crisis on the ability to buy organic, the role of promotion for respondents and product categories. According to the results of the content analysis of the first type, it can be immediately noticed that the main reason for the consumption of organic products among respondents is health care. It is worth adding that the majority of respondents started consuming organic products during the coronavirus pandemic, but a couple of respondents have been consuming organic products since childhood. It

can also be noted that after the pandemic, respondents increased the number of sales channels where they purchase organic products. Among these channels there are now online stores and various marketplaces. Interestingly, the crisis after the COVID-19 pandemic did not play a role in the consumption of organic products among respondents. In addition, advertising is not so important for respondents, but educational content is of interest among respondents. Among the most popular commodity category of organic products among respondents, food products can be distinguished. Content analysis of the third type is based on the semantic study of the text, namely the number of mentions of certain semantic units.

The second type of content analysis includes a brief general description of the answers to key questions from different groups of consumers. The criteria for dividing consumers are their level of income (low, middle and above middle). This content analysis is demonstrated in Table 8.

Table 12. Content analyses of the focus-groups type 2 contains answers to groups of questions already in focus groups, which were divided according to the respondents' income. Among the questions in this application, the following topics were covered: Attitude to organics before COVID-19, Attitude to organics after COVID-19, Factors influencing the choice before COVID-19, Factors influencing the choice after COVID-19, Products that were bought before COVID-19, Products that are bought after COVID-19. Thanks to this content analysis of the second type, it turned out to illustrate the change in the behavior of respondents before and after the pandemic. When it comes to the question of the attitude to organics, it can be concluded that during the pandemic, the attitude towards organic products has changed significantly among consumers due to the fear of death or fear of getting sick with the virus. («I was afraid that I could give up to the vulnerable and die ahah, and therefore decided to switch to a healthier lifestyle»). At the same time, it is interesting that this reason occurs both among respondents with low income, and with middle and above middle.

A valuable conclusion from the content analysis of the second type are the factors that are hard, middle and soft for respondents. In this case, the factors differ for representatives of different income groups. So before the coronavirus pandemic, low-income respondents had hard factors: quality and freshness, middle-income respondents had safety, quality, certification warranty (EU logo) and self-belonging to organic, and above-middle respondents had health benefits, safety and domestic production. And after the pandemic, it can be noticed a shift to factors that are more closely related to health and the environment. It is important to note that after the coronavirus pandemic, respondents not only began to buy organic products more often, but also expanded product categories. For example, before it was mainly only food, cosmetics and alcohol, and after that it was also household chemicals, clothing, vitamins and so on.

Table 12. Content analyses of the focus-groups type 2

Questions	Low income	Middle income	Above middle
Attitude to organics before COVID-19	<p>Of the 7 respondents, only 5 of them consumed organic products before the COVID-19 pandemic («Consumption is periodic, based on the desire to reduce the number of harmful additives consumed in food or cosmetics used on skin, nails, hair. »). Most of the respondents were not interested in organic products before the pandemic, because there were no health issue people come first. «I started buying something organic somewhere during the pandemic, when I started staying at home a lot. »</p>	<p>Most of the respondents (5 out of 7) started consuming organic products from childhood. For many, this is due to the fact that the culture of organic consumption has been instilled since childhood (many cite the example of a cottage and a vegetable garden: «I like it when the product is the way nature intended it, when it does not change artificially, but remains real»). Some of the respondents who did not consume organics before COVID-19, said that then the issue of health was not so important: «I was afraid that I could give up to the vulnerable and die ahah, and therefore decided to switch to a healthier lifestyle»</p>	<p>Most respondents are familiar with organics even before COVID-19. One respondent said that: «I will not label myself as a consumer of organic products. I consume them to the same extent as regular ones. » One respondent consciously approached the consumption of organic matter (this was also connected with the birth of a child): «It has always been important to me – what I eat and how it will affect my body...well-being» and «I will never buy cosmetics with some terrible sulfates – this is damage not only to our planet, but also to health. »</p>
Attitude to organics after COVID-19	<p>On average, most of the respondents started consuming organic products during or after COVID-19. This is in most cases due to the fact that people began to worry about health issues «The pandemic has shown that a lot depends on the diet in our lives, including the state of health. » However, among those respondents who started consuming organic products before COVID-19, it can be noted that thanks to the pandemic, they learned more about organic production or about the benefits of consuming organic products. «However, due to the increased demand for these products, the amount of new useful information has increased. »</p>	<p>For the minority who started consuming organics during COVID-19, the main motive is the benefits to health and the environment. One respondent decided to add organic matter to his daily diet because it is «something new and interesting. » Respondents also noted that self-isolation gave them time to study issues related to organics. «I'm not sure if COVID has affected my attitude. Rather, COVID gave more free time to study this issue. I especially remember March 2020, when I had the opportunity to watch various documentaries about organic products.». One respondent, who has been an organic consumer for more than 4 years,</p>	<p>The pandemic gave respondents time to study health issues. People were afraid of coronavirus infection and decided to minimize the harm to their body. «During the pandemic, there was more time to read and analyze sources. » and «During the pandemic, I began to be interested in what benefits organics brings to people. » However, from the responses of respondents who consume organics before the pandemic, it can be seen that many of them did not notice the influx of interest in organics. They only paid attention to the growth of deliveries from special stores. «I did not see for myself the connection between covid and organic, except for the growing popularity of</p>

				discovered organic clothing during the pandemic when he had previously bought only organic food.			food deliveries. And in my case, my organic store started delivering food during the pandemic, and that's a plus. »		
Factors influencing the choice before COVID-19	<b>Hard</b> Quality Freshness	<b>Middle</b> Health benefits Environmental impact Animal welfare Production practices Nutritional value Availability Absence of GMOs Price Safety Appearance Certification warranty (EU logo) Expectation of better taste Self-belonging to organic More natural appearance Promotion Accessibility in stores Domestic production	<b>Soft</b> Origin	<b>Hard</b> Safety Quality Certification warranty (EU logo) Self-belonging to organic	<b>Middle</b> Health benefits Animal welfare Environmental impact Production practices Nutritional value Availability Absence of GMOs Price Appearance Origin Expectation of better taste Freshness More natural appearance Promotion Accessibility in stores Domestic production	<b>Soft</b> -	<b>Hard</b> Health benefits Safety Domestic production	<b>Middle</b> Environmental impact Animal welfare Production practices Nutritional value Availability Absence of GMOs Price Quality Origin Certification warranty (EU logo) Expectation of better taste Self-belonging to organic Freshness More natural appearance Accessibility in stores	<b>Soft</b> Appearance Promotion
Factors influencing the choice after COVID-19	<b>Hard</b> Health benefits	<b>Middle</b> Environmental impact Animal welfare	<b>Soft</b> Domestic production	<b>Hard</b> Health benefits	<b>Middle</b> Availability Price Appearance	<b>Soft</b> -	<b>Hard</b> Animal welfare	<b>Middle</b> Health benefits	<b>Soft</b> -

	Nutritional value Absence of GMOs Price Safety Quality Expectation of better taste Freshness	Production practices Availability Appearance Origin Certification warranty (EU logo) Self-belonging to organic More natural appearance Promotion Accessibility in stores		Environmental impact Animal welfare Production practices Nutritional value Absence of GMOs Safety Quality Certification warranty (EU logo) Expectation of better taste Self-belonging to organic Freshness Accessibility in stores	Origin More natural appearance Promotion Domestic production		Production practices Certification warranty (EU logo)	Environmental impact Nutritional value Availability of Absence of GMOs Price Safety Quality Appearance Origin Expectation of better taste Self-belonging to organic Freshness More natural appearance Promotion Accessibility in stores Domestic production	
Products that were bought before COVID-19	Organic food (milk, cottage cheese, cheese, vegetables, ice cream) Cosmetics (creams, serums, face toners)		Organic food (dumplings, fruit, jam, peanut paste) Alcohol		Organic food (vegetables, fruits, oil) Alcohol Cosmetics				
Products that are bought after COVID-19	Organic food (dairy products, vegetables, fruits, oils, eggs, ice cream) Cosmetics (creams, toners, face serums) Decor (candles) Vitamins Prebiotics Household chemicals		Organic food (dumplings, khinkali, fruits, vegetables, cheese, cottage cheese, milk, bread, jam, pasta, butter) Clothes Handbag Household chemicals Alcohol Cosmetics (tonics, masks, face creams)		Organic food (cheese, meat, milk, vegetables, fruits, berries, nuts, eggs, frozen semi-finished products, butter) Alcohol Household chemicals Cosmetics (face or body creams, shampoos)				

Source: compiled by the author

In this case, the analysis of the frequency of keywords in the text gave an understanding that respondents often mentioned COVID-19 during focus groups. about the role of the state in social marketing contact. In addition, it can be highlighted that health as a factor of organic consumption is one of the most important among respondents. Also, respondents most often mention food products from all organic product lines. Detailed semantics are presented in *Table 13 Content analyses of the focus-groups type 3*.

*Table 13 Content analyses of the focus-groups type 3*

By focus groups in general	By income level		
	Low	Middle	Above middle
Product: 261 Buy: 223 Organic (adj): 222 Pandemic+covid+covid-19: 141 Organic (noun): 137 Store: 123 Organic products: 120 Composition+reads composition: 75 Goods: 75 Health: 73 Vegetable+fruit vegetables+fruit: 71 Cosmetics+cosmetics care: 60 Order+delivery+order: 56 Price: 55 Nutrition: 52 Food: 48 Food products: 44 Packaging: 39 Vkusvill: 34 Internet: 29 Buys organics: 14 Review: 13 Iherb: 4	Product: 84 Buy: 80 Organic (adj): 57 Store: 41 Cosmetics: 32 Organic (noun): 29 Pandemic: 28 Products: 25 Organic products: 20 Health: 19 Order: 18 Food: 17 Composition: 16 Purchase: 15 Leather: 14 Food products: 13 Vkusvill: 13 Nutrition: 12 Price: 11 Quality: 10 Sports: 9 Product: 9 Care: 8 Harmful: 6 Review: 6 Pesticide: 6 Buys organic: 6 Vitamin: 5 Online: 5 Cosmetics care: 5 Milk: 5 Organic product: 5 Iherb: 4 Certification: 4 Reads composition: 4	Organic (adj): 81 Product: 78 Buy: 70 Organic (noun): 53 Store: 45 Composition: 43 Product: 36 Organic products: 34 Covid: 34 Packaging: 32 Price: 30 Food: 30 Health: 28 Vegetable: 25 Pandemic: 22 Vkusvill: 21 Healthy: 19 Taste: 18 Food products: 16 Fruit: 15 Clothing: 14 Nutrition: 13 Fruits vegetables: 10 Delicious: 7 Online: 7 Review: 7 Covid-19: 6 Organic products: 6	Product: 99 Organic (adj): 84 Buy: 73 Organic products: 66 Organic (noun): 55 Store: 37 Pandemic: 34 Product: 30 Health: 26 Cosmetics: 23 Order: 21 Nutrition: 19 Food: 18 Online: 17 Covid: 17 Buys organic: 14 Price: 14 Vegetable: 14 Composition: 12 Delivery: 8 Chemistry: 11 Order: 9 Packaging: 7 Fruit: 7 Household chemicals: 6 Food products: 6 Healthy: 6 Natural: 6 Eco: 6

*Source:* compiled by the author

Respondents tend to read product reviews, pay attention to the packaging and read the composition. It can be noted that the price of organic products was often discussed. Figure 1 shows a word cloud based on the semantics of all respondents.





*Figure 11 Word cloud based on the semantics of all respondents*

*Source:* compiled by the author

The narrative analysis of the text is a narrative story of a focus group for presenting the text in a more structured version. The narrative analysis will be carried out only once, since the focus group was conducted according to a certain scenario, therefore the text is chronologically, thematically and logically consistent.

The focus group participants are quite different in age (18-34 years), living in different cities of Russia (Moscow, St. Petersburg, Nizhny Novgorod, Yekaterinburg, Yaroslavl, Kaliningrad) and with different income levels. Each of the respondents has an active lifestyle and is currently a consumer of organic products. An interesting conclusion turned out to be that almost all respondents who started consuming organics during COVID-19 did so because of health concerns. Additional motives were concern for the environment, the desire to try something new and the best taste of organics. Those who consume organics before the outbreak of the pandemic have this habit of consuming organics since childhood or adopted it as a result of communication with friends. Most often, respondents identified the following organic products:

1. Food products: dairy products, vegetables and fruits, oils
2. Cosmetics: creams and lotions, shampoos and shower gels
3. Household chemicals: dishwashing soap
4. Alcohol: vodka and wine

Less often respondents noted:

1. Clothing: organic cotton T-shirts, fur coats
2. Bags: organic leather, shoppers
3. Home Decor: Candles
4. Cosmetics: foundation, eye shadow
5. Vitamins and healthy food supplements
6. Food: bakery products, meat, groceries

The opinion of respondents in each of the focus groups was divided about checking the goods before going to the store. Some respondents read information on the Internet, someone (for example, Ivan from the second focus groups) communicated with consultants in the store («Oh, for the first time I went to the bionaturproduct store and talked with consultants. It seems to me that it is very important when a consultant can answer all these questions and help in choosing a product so that it is not only organic, but also delicious»), someone buys already familiar products («In general, I usually buy already familiar products for myself, because I am confident in their composition»), and someone comes to the store and chooses a product, focusing on the composition.

Almost all respondents agreed that reviews from the Internet or advice from friends play a big role for them. Some people read reviews not only about the product, but also about stores.

Also, respondents often named stores where they buy organic goods. VkusVill turned out to be the leader, as well as X5 Retail Group stores. When it came to the availability of organic products in the store, respondents highlighted a change in the assortment of Pyaterochka and Lenta, that they did not have organic products before, but now they can be easily found. Moreover, they trust these stores in choosing organic products («If, for example, I'm going to Pyaterochka or Lenta, then I'll read there, because you can accidentally buy anything there»).

Hard factors for consumers with low income were:

1. Health benefits
2. Nutritional value
3. Absence of GMOs
4. Price
5. Safety
6. Quality
7. Expectation of better taste
8. Freshness

With middle income:

1. Health benefits
2. Environmental impact

3. Animal welfare
4. Production practices
5. Nutritional value
6. Absence of GMOs
7. Safety
8. Quality
9. Certification warranty (EU logo)
10. Expectation of better taste
11. Self-belonging to organic
12. Freshness
13. Accessibility in stores

With above middle income:

1. Animal welfare
2. Production practices
3. Certification warranty (EU logo)

In general, COVID-19 has affected the consumption of organic products. Most respondents admitted that they started consuming organic products during the pandemic. At the same time, respondents began to actively engage in sports and devote more time to it.

As for certificates, they play a role, but more often consumers look at the composition, not the certificate («It didn't affect before, but now, probably, yes. But to be honest, I don't always look at certificates. More often still on the composition»).

In the last part of the focus group, when it came to promoting organics, respondents unanimously agreed that there is a role for advertising, but it does not play a big role. The role of certified products, product quality and composition are much more important. There was also a unanimous decision on the company's educational role: respondents want manufacturing companies to tell consumers about organics («Of course yes, because through manufacturers you can learn more about the benefits of organics for the environment, our health. They know the best of all» and «therefore they could, for example, write something on packages. I liked it when it was done on condiments. Like what you can cook from it. That's what it would be cool to see in organic. But not what to cook, but some facts about the goods ahah»).

Based on the results of a qualitative study, the following conclusions can be drawn:

RQ 1 «*Consumers learned more about organic products during the COVID-19 pandemic*» was illustrated. As can be seen from the 1 and 2 content analyses, as well as narrative analyses, many consumers have started to consume organic products during the pandemic. In addition,

consumers during self-isolation began to worry about the issue of health, and therefore people began to read more about organic products.

RQ 2 «*Consumers used to buy organic products in specialty stores before COVID-19 pandemic, and now they purchase these products in regular grocery stores or order online*» was highlighted. As the content analysis 1 shows, many consumers bought organic products in special stores before the pandemic. But some went to markets, used supermarkets and VkusVill. Sometimes they even ordered online on OZON. However, purchases online and in regular stores have really increased now.

RQ 3 «*The reasons for the consumption of organic products relative to the income level are different: for "low income" – organic products are a fashion, and for "above middle" - health care*» was not illustrated. For different groups of consumers, the main reason for organic consumption is the same: health care. The secondary reasons for each group are also about the same: concern for nature, the best taste, a sense of organics.

RQ 4 «*Before the COVID-19 pandemic, consumers consumed organic products less frequently than they currently do*» was shown. As shown by three focus groups, consumers began to worry about their health, as a result of which they added organic products and sports to their diet. Even if consumers used organic products before the pandemic, during self-isolation they delved more into this topic.

RQ 5 «*The crisis doesn't have an influence on the consumption of organic products*» was partially demonstrate. As can be seen from the content analysis 1, not all consumers felt the difficulty in buying organic products due to the crisis. However, some did point out that they noticed how prices rose, as a result of which organic products became less affordable in terms of price.

RQ 6 «*Before the COVID-19 pandemic, the consumption of organic products was associated with the fashion factor, but after the pandemic, people began to worry more about their health and the environment, so they switched to organic*» was not represent. The majority of respondents who used organic products before the pandemic claim that they have been doing it since childhood or introduced it into their diet for the sake of health and environmental care (as can be seen from content analyses 1 and 2, as well as from narrative analysis)

RQ 7 «*Low-income consumers tend to focus on hard factors, middle-income consumers tend to focus on hard and medium factors, above middle-income consumers tend to focus on hard, medium and soft factors*» has not been illustrated. Low-income and middle-income consumers pay attention to hard, medium and soft factors, and consumers with above middle income pay attention to hard and medium factors.

RQ 8 «Consumers attribute the factors of promotion, accessibility in stores and domestic production to soft factors and the factor self-belonging to organic to medium factors» was partially shown. Factors promotion and accessibility in stores all the focus groups highlighted as middle, factor domestic production focus-group with low-income attribute like soft factor, when another 2 groups like middle factors. Self-belonging to organic attribute like middle (low and above middle income) but middle-income group attribute it like hard factor.

RQ 9 «Before the COVID-19 pandemic, consumers mostly paid attention to hard factors that influenced the decision to buy organic products» has not been highlighted. From hard factors only one group (with above middle income) highlighted only one factor (Health benefits), while most of factors are from medium group.

RQ 10 «In organic products promoting, it is important to give consumers knowledge about the specifics of organic brands in Russia in order to avoid negative consumer experience associated with greenwashing» was shown. Consumers want the company to engage in education as part of advertising campaigns: to share facts about organics.

## **2.1.2 Online survey method: methodology and findings**

### ***The goal, objectives, and hypotheses of quantitative research (online survey method)***

Qualitative research has shown that the factors influencing the consumption of organic products before COVID-19 and after are differ. As a result, it turned out to formulate a pool of important (hard) factors for all consumer groups, but their number is large. In addition, there were observed trends in the philosophy of consumption of organic products Pre-COVID, COVID and Post-COVID time.

In this case, the goal of quantitative research is to determine the identification of factors influencing the consumer in the process of making a purchase decision at the present time because of COVID-19. Additionally, issues related to the identification of the most and least popular categories of goods will be considered, as well as the study of the issue related to the promotion of organic goods with elements of education.

The main objectives of quantitative research are reflected below:

1. To investigate a sample of existing consumers of organic products
2. Identify the most and least popular categories of organic products and the frequency of purchases in post-COVID time
3. To identify the factors influencing the consumer and leading to their purchase in post-COVID time
4. Determine the average receipt of purchases of organic products per month

5. To investigate the main reasons for the transition of consumers to organic in post-COVID time
6. Identify the most popular way to buy organic products in post-COVID time
7. Determine the relationship between the average organic receipt per month and the level of income of consumers
8. Determine the communication channel that is most in demand for organic consumers in post-COVID time
9. To investigate the fact of the role of education as an element of a communication campaign promoting organic products
10. To analyze and interpret the results obtained.

Based on the information provided, the hypotheses of the study were developed:

1. Organic food products are in the greatest demand among consumers, and organic home decor is the least. *(The hypothesis is formulated from the results of a qualitative study)*
2. Most consumers in the process of choosing a product are strongly influenced by the reviews and price of an organic product. *(The hypothesis is formulated from the results of a qualitative study)*
3. In general, the average receipt, number of purchases per month and the frequency of purchases of organic products per month depend on age. *(The hypothesis is formulated from the market review)*
4. The frequency of purchases of organic products depends on the ability to order the product online. *(The hypothesis is formulated from the market review)*
5. The main reason for switching to organic products after COVID-19 is concern for health, in second place is concern for the environment. *(The hypothesis is formulated from the literature review)*
6. In most cases, consumers buy organic products online. *(The hypothesis is formulated from the literature review)*
7. Most consumers use social media to read news about organic, but sometimes they get information from organic companies. *(The hypothesis is formulated from the results of a qualitative study)*
8. Most consumers support educational content from organic food companies. *(The hypothesis is formulated from the results of a qualitative study).*

### ***Description of the general population and justification of the sample***

To obtain information about the confirmation and refutation of the hypotheses presented above, a questionnaire method was chosen, which allows us to develop questions with an arbitrary answer option, as well as questions using all types of scales: nominal, ordinal and quantitative. The questionnaire was compiled in Google Forms, a program for creating online surveys.

Next, we will proceed to the description of the general population and the justification of the sample. Boundaries of the general population (RosKachestvo, 2021):

1. Geographical: citizens of cities of the Russian Federation.
2. Demographic: 18-35 years old, low, middle and above middle income (from 20,000 rubles per month).
3. Psychographic: innovators, active lifestyle, middle social class, striving to improve their lives.
4. Behavioral: started consuming organic products during or after the pandemic of COVID-19, combine organic products with regular ones.

The main key characteristics of the general population will be age, income level, behavioral characteristics (at least one purchase of organic product).

According to Rosstat, the total urban population of Russia aged 18-35 is 23,270,460 people (Rosstat, POPULATION OF THE RUSSIAN FEDERATION BY GENDER AND AGE, 2021). In addition, the Center for the Study of Consumer Behavior of Roskachestvo (CIP) conducted a survey (RosKachestvo, 2021), which showed that 82% of the surveyed Russians bought organic products at least once. Consequently, the total population is 19,081,777 people.

In this study, such a sampling method as «snowball» was used, which is a subspecies of deterministic sampling. This method allows you to interview the required number of respondents in a relatively short period of time. Moreover, this method is the most acceptable, since at subsequent stages it reduces the influence of the interpersonal factor. To form a sample using probabilistic methods, it is necessary to have a database consisting of potential respondents. In this regard, the chosen method is optimal (Market, Snowball sampling: definition, method, advantages and disadvantages, 2022).

Calculation of the sample size using the Allcalc (Allcalc, 2022) online calculator: with a confidence probability of 95% and a confidence interval of 5% 384 people.

### ***Questionnaire design development***

The questionnaire consists of 3 blocks:

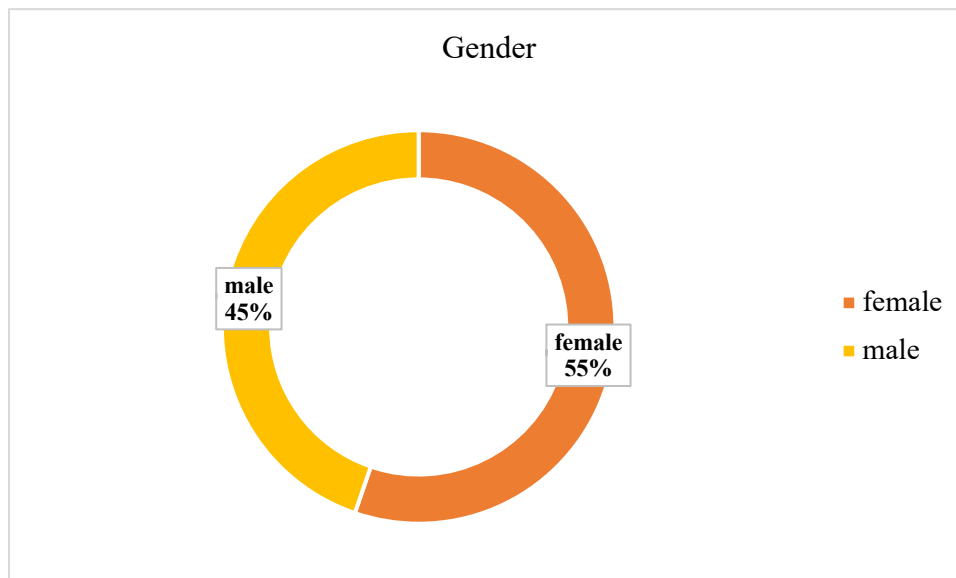
1. Screening questions that allow to filter out people who do not live in cities, haven't bought organic products at least one time and are not in the 18-35 age group.

2. The main part, where the questions are located, allowing to assess the factors influencing the consumer in the process of making a purchase decision at the present time.
3. Socio-demographic block of issues.

The questionnaire is located in Appendix 4.

### ***Processing and description of quantitative research results (online survey method)***

It is important to note that the results presented below are processed mainly using the SPSS Statistics software package. The survey was conducted in Russian, and the analysis of statistical data was translated in English, at the end of the analytical work. A total of 627 people took part in the online survey, however, due to the presence of screener questions and outliers, only 419 respondents were included in the final sample, of which 55% (230) were women and 45% (189) were men, as can be seen in *Figure 12*.



*Figure 12 Gender of the respondents*

*Source:* compiled by the author

As for the type of employment, respondents mostly either work for hire or are students (34% and 37%, respectively). Slightly less than a quarter of respondents combine their studies with work or are self-employed. Schoolchildren, housewives and unemployed people make up less than 5% in total (*Figure 13*).



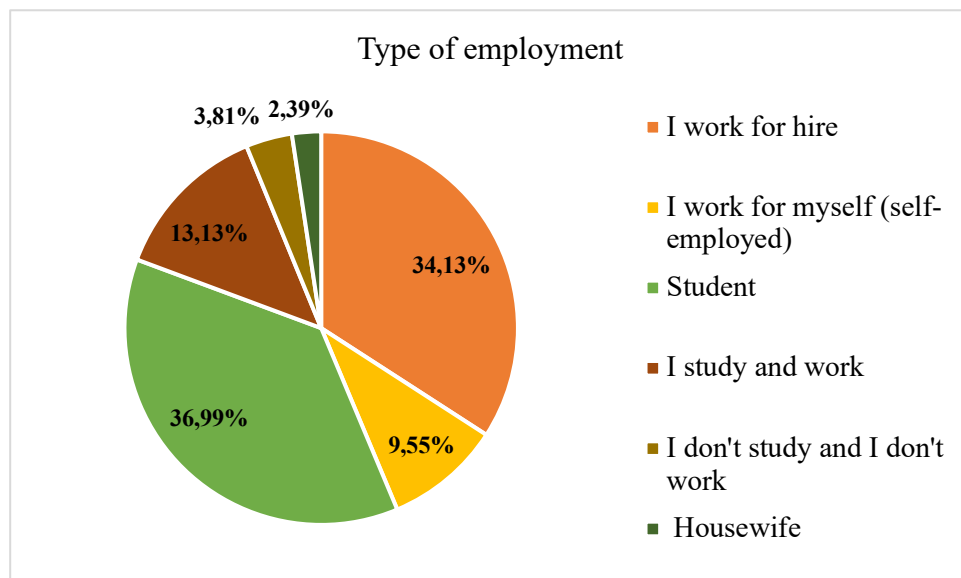


Figure 13 Type of employment of the respondents

Source: compiled by the author

Let's consider a detailed description of the first hypothesis of the study:

**Hypothesis 1:** «Organic food products are in the greatest demand among consumers, and organic home decor is the least». There are no dependent variables; the scale is nominal; the type of analysis is graphical interpretation.

As can be seen from the diagram (Figure 14), respondents most often mention food products, cosmetics, beverages and alcohol. Less often, home decor, clothes/bags and children's products. With the help of semantic text analysis, the results that the respondents wrote in the category «Other» were analyzed and grouped. These categories were grouped into the following: children's products (baby care, clothes, diapers, etc.), intimate hygiene (menstrual cups, pads, condoms), beverages (lemonades, kambucha, coffee, etc.).

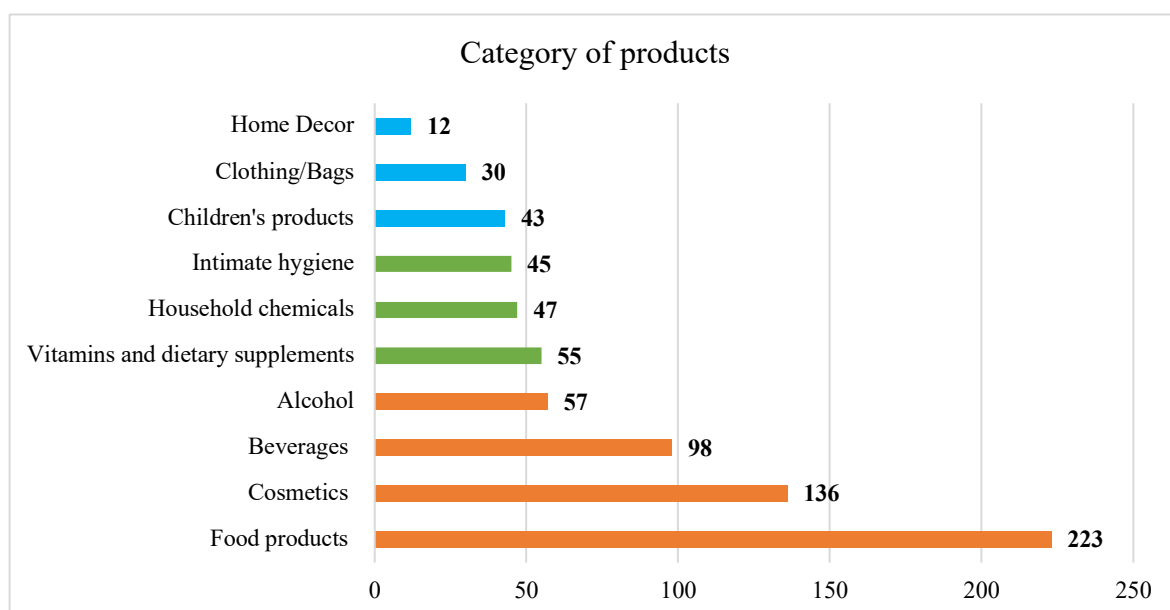


Figure 14 Category of products

Source: compiled by the author

At the same time, it is interesting that men and women are more likely to buy «food products», «cosmetics» and «beverages» (Figure 15).

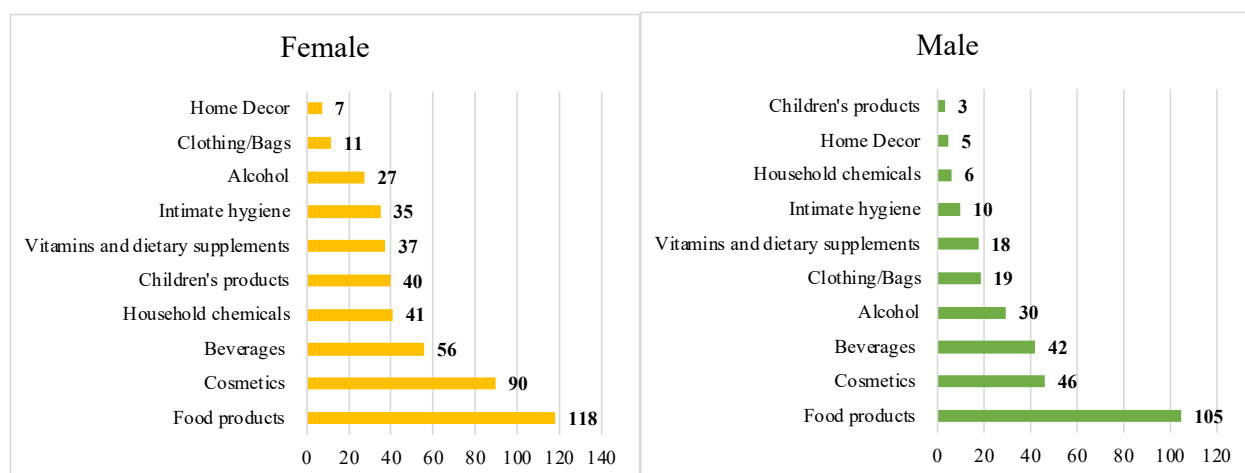


Figure 15 Category of products (influence on gender)

Source: compiled by the author

The data obtained allow us to **partially confirm the first hypothesis**. Indeed, the category of «Food products» has the greatest demand among all consumers of organic products (223 mentions), however, such a large gap between the first two categories (87 mentions) is due to the percentage preponderance of the female cohort of respondents.

Let's proceed to the consideration of the second hypothesis of the study:

**Hypothesis 2:** «Most consumers in the process of choosing a product are strongly influenced by the reviews and price of an organic product». There are no dependent variables; the scale is ordinal; the type of analysis is descriptive statistics.

Based on the data obtained, (appendix 5) was compiled (where score 1 is the most important factor), from which it can be seen that for the majority of respondents, the key factors when making a decision to buy organic products is «Product price». At the same time, it is interesting that «Opinion of the environment», «Advertising on the Internet» and «Advertising on the street, at points of sale, etc. offline advertising» are the least significant for consumers. As for «Promotions and discounts», as well as «Availability of live experience (product reviews) », according to respondents, these factors do not play a significant role in the process of choosing a product, but act as an additional value.

Accordingly, we conclude that it is possible to **partially confirm Hypothesis 2**. Indeed, the «Product price» plays the greatest role for respondents, however, «Product reviews» do not play an important role, but simply is an accompanying factor.

The **Hypothesis 3** of the study is:

H0: «The average receipt, frequency of purchases per month and the frequency of purchases of organic products per month do not depend on age. »

H1: «In general, the average receipt, number of purchases per month and the frequency of purchases of organic products per month depend on age. »

Dependent variables – average receipt, frequency and number of orders per month; independent variable – age; scales – quantitative and ordinal, respectively; type of analysis – One-Way ANOVA

At the first stage, an ANOVA analysis will be conducted and determined the relevance of the dependence between the variables (*Table 14*).

*Table 14 ANOVA*

ANOVA						
Source		SS	df	MS	F	Prob>F
Average monthly receipt	Between groups	51907853,437	3	17302617,812	7,66	<b>0,000</b>
	Within groups	937360880,587	415	2258700,917		
	Total	989268734,024	418			
Frequency of purchases per month	Between groups	4638,688	3	1546,229	5,913	<b>0,001</b>
	Within groups	108514,391	415	261,48		
	Total	113153,079	418			
Quantity of products per month	Between groups	30,663	3	10,221	4,261	<b>0,006</b>
	Within groups	995,585	415	2,399		
	Total	1026,248	418			

*Source:* compiled by the author

Thus, Table 16 shows that the significance coefficient (Prob>F) is less than 5% between all variables. This suggests that the null hypothesis about the absence of a connection between variables is rejected. Accordingly, the data obtained are statistically significant, and there is a relationship between the «average receipt», «frequency of purchases per month», «number of purchases per month» and the «age» of the respondent.

Next, consider the values of averages and standard deviation (Appendix 6). Descriptive statistics show that the average check for all ages is 1,405 rubles, and for respondents aged 18-24 it is approximately 1,288 rubles, while for the older generation of 25-34 years – 1,641 rubles. In all cases, the standard deviation is large enough, since the scope of the amount can reach 10000 rubles.

Interestingly, the frequency of consumption of organic products also varies depending on age (Appendix 6). For example, the younger generation of 18-24 years consume on average 9-10 times a month, while consumers 25-34 years – 15-16 times a month. At the same time, the number of products in one month does not differ in general.

Based on the Levene's test (Appendix 7), the variances of the dependent and independent variables are not equal. Accordingly, Tamhain's T2 method was used for further analysis (Appendix 8).

From the analysis of multiple comparisons, we get that there are no significant differences between the ages and the average check. However, if we assume a significance level of up to 10%, we will notice a statistically significant difference between the ages of 18-24 years and 25-34 years (8.2%). As for the frequency of orders per year, a significant difference is observed and amounts to 6.7%.

Thus, we can conclude **that Hypothesis 3 has been partially confirmed**. Indeed, there is a dependence between the average receipt, the frequency of purchases, the number of organic products purchased and the age of the respondent. Although these variables do not have a significant difference relative to the age category of consumers, it can still be concluded that with increasing age of the buyer, his average receipt and the frequency of purchases of organic products increases.

Next, it is necessary to check whether there is a dependence of the frequency of purchases on the ability to buy organic products **online (Hypothesis 4)**:

H0: «The frequency of purchases of organic products depends on the ability to order the product online. »

H1: «The frequency of purchases of organic products doesn't depend on the ability to order the product online. »

Dependent variable – frequency of orders; independent variable – online purchases; scales – quantitative; type of analysis – correlation and regression

Based on descriptive statistics (Appendix 9), we can conclude that the distribution of the study results is normal (or close to normal), since the standard errors of Asymmetry and Excess do not exceed the distribution values themselves. In this regard, we will use the Pearson coefficient for further analysis (Appendix 10).

The significance of the Pearson correlation is less than 5%, which indicates a statistically significant relationship between the variables. Accordingly, the null hypothesis about the absence of a connection is rejected and an alternative one is accepted. At the next stage, it is necessary to check the R-squared determination coefficient (Table 15).

Table 15 R-squared determination coefficient (Hypothesis 4)

Model	R	R-squared	Adjusted R-squared	The Standard Error of Estimate
1	0,136	0,018	0,016	16,32

Source: compiled by the author

The adjusted R-squared is 1.6%. This suggests that only 1.6% of the ability to buy organic products online affects the change in the frequency of orders for the period. Thus, there are still 98.4% of other factors that are not taken into account in this model. Next, we will determine the significance of the regression model using the ANOVA method (Table 16).

Table 16 ANOVA (Hypothesis 4)

ANOVA*					
Model	Sum of squares	n	Mean square	F	Significance
Regression	2083,705	1	2083,705	7,823	<b>0,005</b>
Remainder	111069,374	417	266,353		
Total	113153,079	418			
*Dependent variable: Frequency of purchases per month (times)					

Source: compiled by the author

The table shows that the significance of the general regression model is less than 5%, respectively, there is a relationship between the variables and it is statistically significant. Consider the significance of individual variables (Table 17).

Table 17 Coefficients (Hypothesis 4)

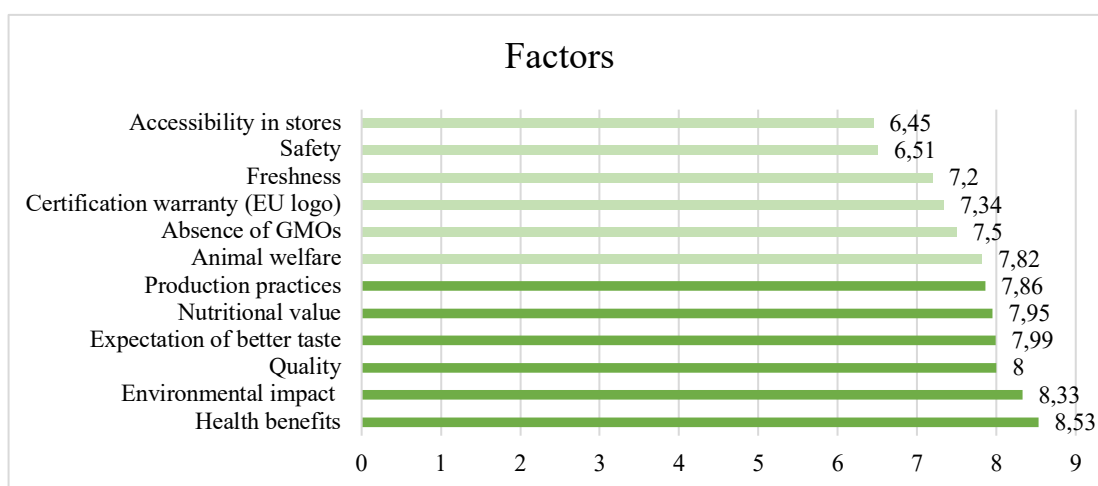
Coefficients*					
Model	Unstandardized coefficients		Standardized coefficients	T	Significance
	B	Standart error	Beta		
Constant	15,294	1,492		10,25	0
Online orders (times)	-0,983	0,351	-0,136	-2,797	<b>0,005</b>
*Dependent variable: Frequency of purchases per month (times)					

Source: compiled by the author

The significance of both variables is less than 5%, respectively, it becomes possible to proceed to the next step of regression analysis – the construction of the regression equation. Based on the correlation and regression analysis carried out above, the following equation can be derived: Frequency of purchases (per month) = 16 times-1.3 times\*number of online orders. It follows from the equation that with each additional online purchase, the average frequency of organic purchases per month will decrease by 1.3 times (considering errors). Thus, hypothesis 4 about the presence of dependent – the difference between the frequency of orders and the speed of delivery is confirmed.

Next, **Hypotheses 5** will be considered: «The main reason for switching to organic products after COVID-19 is concern for health, in second place is concern for the environment».

In order to test this hypothesis, a diagram was compiled with the average estimates of respondents regarding the factors for the transition to organic (*Figure 16*).

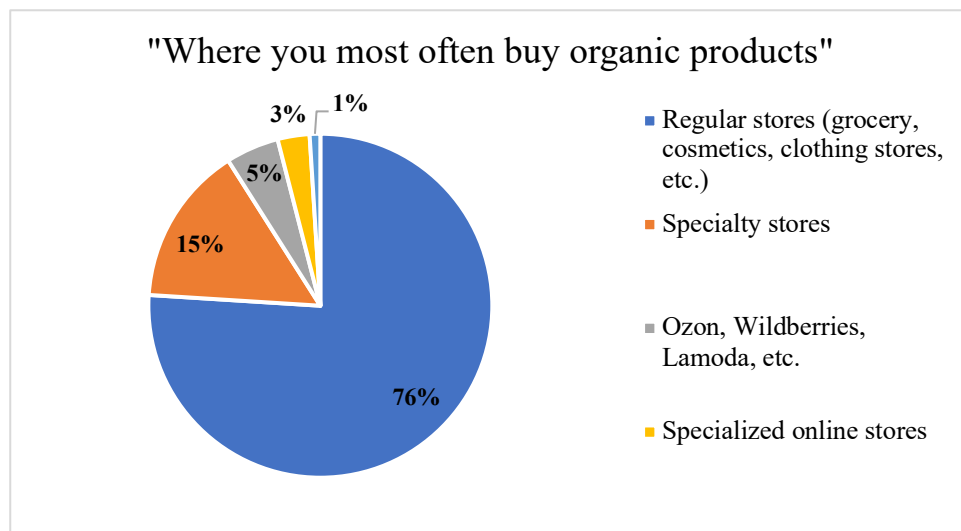


*Figure 16 Factors for the transition to organic*

*Source:* compiled by the author

Thus, answering **hypothesis 5** of the study, we can conclude that it is **confirmed**. Health benefit and Environmental impact were relatively highly rated by respondents – 8.53 and 8.33 points out of 10, respectively. As for the question of the quality of organic matter, his score is 8 points out of 10 possible, which, of course, is a good result.

The next step is **Hypotheses 6**: «In most cases, consumers buy organic products online». To do this, a pie chart with the results will be built.



*Figure 17 Sales channels*

*Source:* compiled by the author

As can be seen in *Figure 17*, the majority of respondents buy organic products in regular stores (76%), special offline stores are in second place (15%), online channels are in third and fourth place (8% in total), markets are in last place (1%). Therefore, it can be concluded that **the hypothesis 6 has not been confirmed.**

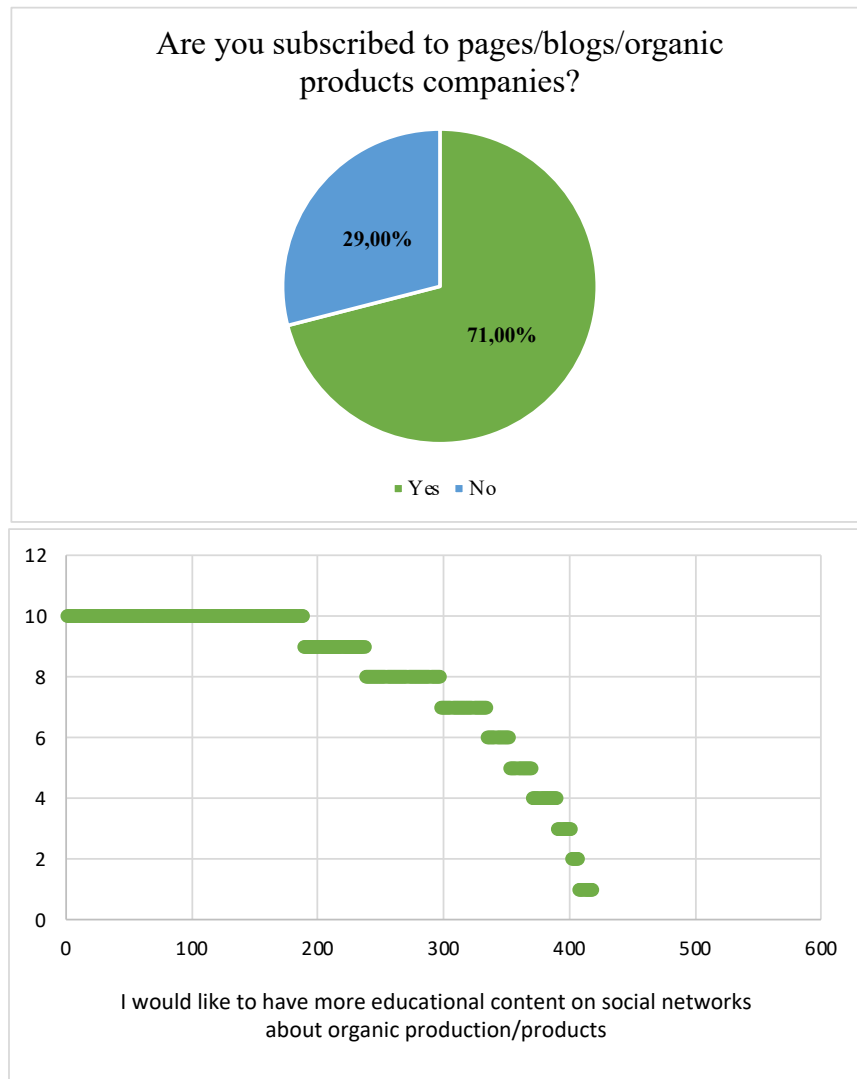
Then **Hypothesis 7** will be considered: «Most consumers use social media to read news about organic, but sometimes they get information from organic companies. ». There are no dependent variables; the scale is ordinal; the type of analysis is descriptive statistics.

Based on the data obtained in (Appendix 11), respondents «partially disagree» with the statement that they receive information about organic products from companies. Moreover, most often consumers indicated «definitely disagree» with the expression. In other words, most consumers of organic products do not notice that manufacturing companies give consumers information about organic products.

Interestingly, the respondents still «partially agree» or «generally agree» with the statement that they receive information through Internet sources (social media). That is, it can be argued that consumers are involved in educational content about organic products.

Thus, **hypothesis 8 was partially confirmed.** Indeed, consumers most often learn information from social networks, but rarely receive information from manufacturing companies.

In conclusion, the last hypothesis 8 will be considered: «Most consumers support educational content from organic food companies». There are no dependent variables; the scale is nominal; the type of analysis is graphical interpretation.



*Figure 18 Graphical interpretation (Hypothesis 8)*

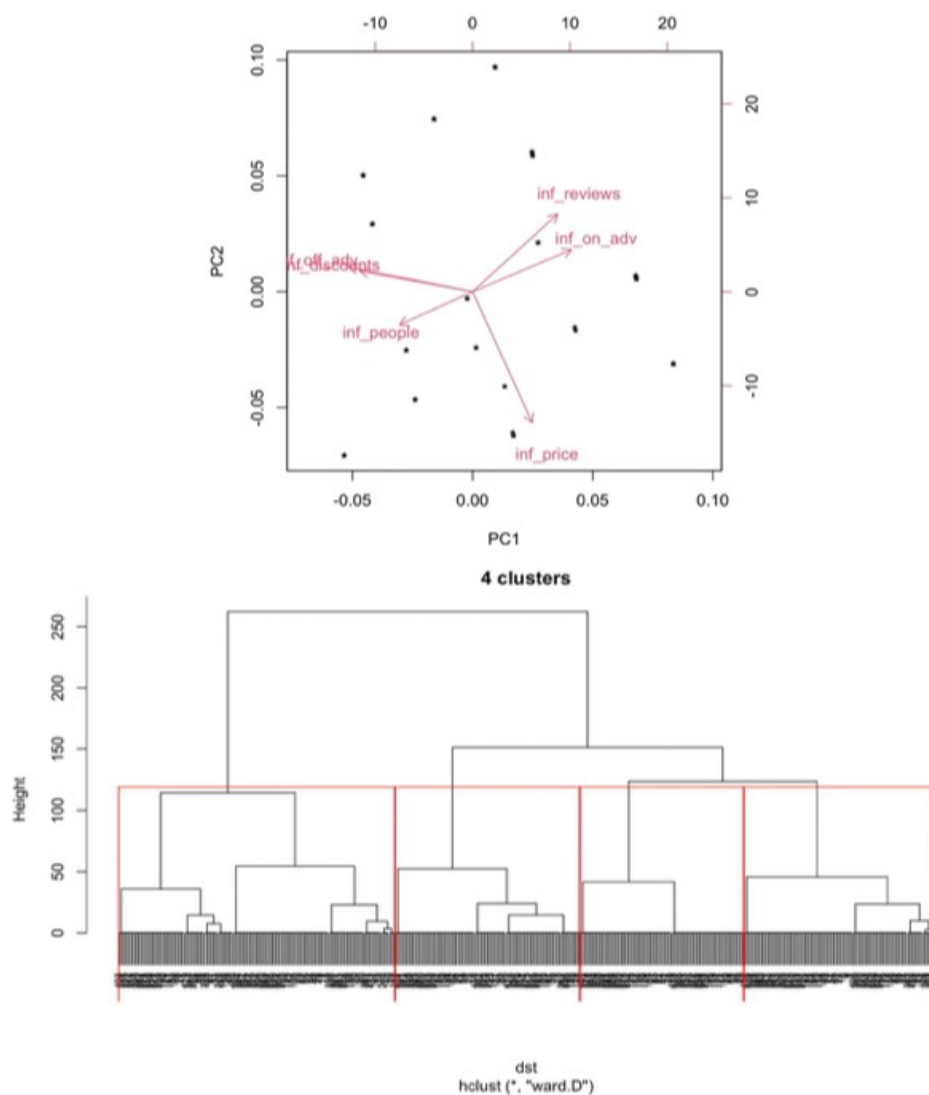
*Source:* compiled by the author

Based on the graphs drawn up (*Figure 18*), it can be seen that 71% of respondents subscribe to social networks that highlight information about organic products and production. It can also be noted that most respondents would like to receive educational content from manufacturing companies (about half of the respondents gave 10 out of 10 points). Therefore, **hypothesis 8 was confirmed.**



### 2.1.3 Cluster analysis: methodology and findings

After conducting a qualitative and quantitative empirical study, it turned out to formulate a block of factors that affect the choice of consumers when buying organic products after the coronavirus pandemic. Moreover, it turned out to explore issues that relate to the consumption of organic matter in general. The next logical step after Mix Research is to analyze and describe clusters of current consumers of organic products after the coronavirus pandemic. In this analysis, a cluster analysis was carried out, which allows us to divide consumers into clusters as an organic products consumer after the COVID-19 pandemic. The R language was used for cluster analysis. As a result of cluster analysis, consumers were divided into 4 main clusters, as shown in *Figure 19*.



*Figure 19 Clusters of organic consumers*

*Source:* compiled by the author

According to the online survey, an analysis of the main components was carried out, which was based on the respondents' answers about the factors influencing their choice of organic

products (the price of the product, live reviews, discounts on products, online and offline advertising).

The next stage was a cluster analysis, in which the preference distance between respondents was calculated using the Manhattan method and clustering using the Ward method. Then the Hartigan index was carried out, which showed that the most optimal number of clusters is four. Next, an analysis of each of the clusters will be given.

Cluster 1: Connoisseurs.

*Table 18 Cluster 1 (basic questions)*

Question	N	Decryption
Opinion of the environment (friends, parents, etc.)	1	Consumers depend on the opinions of others
Advertising on the street, at points of sale, etc. offline advertising	0,85714	Offline advertising is quite an influencing factor when choosing organic
Promotions and discounts on goods	1	Discounts and promotions play a big role for consumers
Product price (profitability of purchase)	1	Price plays a big role for consumers
Advertising on the Internet (including blogs)	0,38776	Advertising on the Internet does not play a role
Availability of live experience (product reviews)	0,06122	Reviews on the Internet are not important for consumers
Gender	0,56122	To a greater extent, female consumers are in this cluster
age_18-24	0,61224	Most of the consumers are aged 18-24
age_25-35	0,38776	A smaller part of consumers aged 25-35 years

*Source:* compiled by the author

As can be seen from *Table 18*, the opinion of the environment, promotions and discounts on goods and price has a greater influence on this cluster when choosing organic products. Product reviews don't make any sense. Offline advertising can also have an impact. Most of this cluster is aged 18–24.

*Table 19 Cluster 1 (behavior)*

Question	N	Decryption
How often do you buy organic products?	0,35714	This cluster does not buy organic products so often
How much is your average MONTHLY receipt approximately?	0,70408	The average check for the month is high
How many products do you buy on average per month?	0,21429	This cluster does not buy so many (pieces) of organic goods
What organic products do you buy most often?	0,86735	This cluster buys mainly plenty of category of goods.

*Source:* compiled by the author

As can be seen from *Table 19*, this cluster buys organic products not so often and not enough in quantity, but the check is high. From this it can be concluded that they purchase expensive goods. Also, as follows from the coefficient of 0.867, they are consumers of several categories of organic products. When encoding a given 1 – several categories, 0 – one category.

*Table 20 Cluster 1 (factors)*

<b>Question</b>	<b>N</b>	<b>Decryption</b>
Health benefits	0,84694	The health care factor plays a big role
Environmental impact	0,80612	The factor of caring for the environment plays a big role
Animal welfare	0,82653	The factor of caring for animals plays a big role
Organic production	0,86735	Factor organic production plays a big role
Nutritional Value	0,87755	The nutritional value factor plays a big role
Non-GMOS	0,80612	The non-GMO factor plays a big role
Safety	0,57143	The factor of product safety is not very important for this cluster
Quality (composition)	0,78571	The quality factor plays a big role
Certified Warranty	0,37755	The certification factor is not important
Taste	0,51633	The taste factor is relatively important
Freshness	0,82653	The freshness factor of products is important
Availability in stores	0,52041	The availability factor in the store is not very important

*Source:* compiled by the author

*Table 20* presents the factors that are most and least significant for the representatives of this cluster. Under the most significant factors, those highlighted in green and yellow are highlighted. It can be immediately noted that the most pronounced factors for this cluster are nutritional values (0.88), organic production (0.87), health benefit (0.85), animal welfare (0.83) and freshness (0.83). The least important are environmental impact and non-GMOS (0.81) and quality (0.79). Such factors like safety (0.57), availability in stores (0.52), taste (0.52) and certified warranty (0,38) are not such important for this cluster. Another interpretation of the data is presented in Figure 20. The most important factors are marked in green.

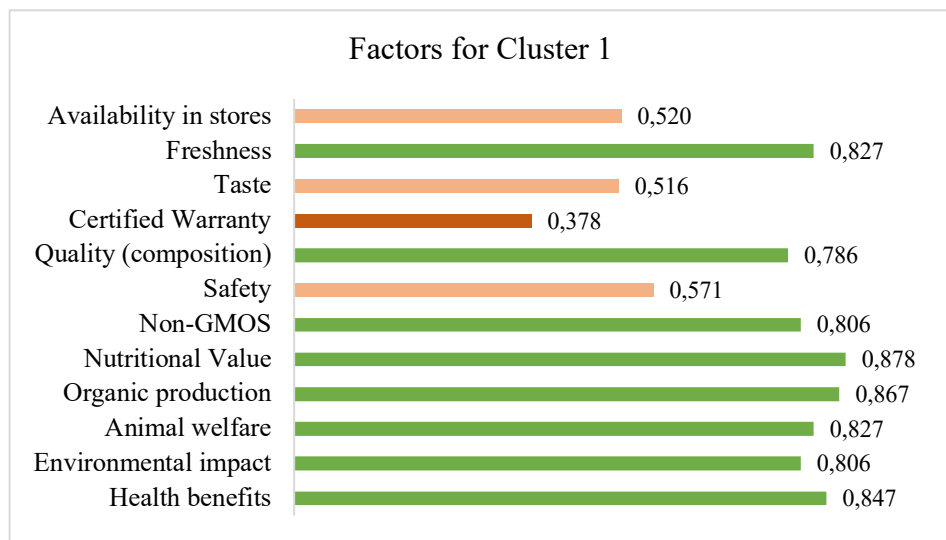


Figure 20 Factors for Cluster 1

Source: compiled by the author

Table 21 shows the reasons why this cluster started consuming organic matter.

Table 21 Cluster 1 (reasons)

Question	N	Decryption
I started buying organic products because I started taking care of my health	0,2449	This cluster has not started organic consumption due to health concerns
I started buying organic products because I am concerned about environmental issues	0,30612	This cluster has not started organic consumption due to concern for the environment
I started buying organic products to try something new	0,67347	This cluster may have started consuming organic matter to try something new
I started buying organic products because it's a trend now	0,38776	This cluster has not started organic consumption due to fashion
I started buying organic products because they taste better	0,5102	This cluster may have started consuming organics because of the better taste

Source: compiled by the author

The highest coefficient is for the reason «I started buying organic products to try something new». In second place, «I started buying organic products because they taste better». This suggests that this cluster is following new directions in consumption and is open to new ones. Such reasons like health care and environmental issues are not important.

Table 22 Cluster 1 (additional questions)

Question	N	Decryption
I always feel more organic (feeling healthy) when I buy organic products	0,55102	This cluster quite like the feeling of organic
Specify where you most often buy organic products?	0,34694	This cluster does not use plenty of sales channels. Mostly they use only one

Are you subscribed to pages/blogs/organic products companies?	0,77551	This cluster monitors the organics in social networks
I would like to have more educational content on social networks about organic production/products	1	This cluster strongly wants more educational content in social networks
I can confidently call my lifestyle active	0,73469	This cluster can be called relatively with an active lifestyle

*Source:* compiled by the author

Table 22 shows additional questions that are aimed at the cluster's agreement or disagreement with the statements, as well as their relation to the promotion of organic products. As a result of cluster analysis, it can be concluded that this cluster leads a moderately active lifestyle. Also, most often they use one sales channel through which they buy organic goods, since the coefficient is 0.35 (with data encoding 1 – several channels, 0 – one). As for subscriptions to pages/blogs/organic products companies or bloggers, this cluster tends to subscribe to these representatives. In addition, they strictly want more educational content on social networks about organics.

Summing up the results of the analysis of the first cluster of organic consumers, we can characterize them as connoisseurs, since they started consuming organic products for the reason of trying something new and being in trend. Also, their average check per month is quite high with a relatively small number of purchases. When analyzing the factors, it can be concluded that they are characterized by both a basic set of factors (health care, environmental care) and factors like nutritious values and quality. They follow organic blogs on social networks and crave more educational content.

#### Cluster 2: Organic activists

*Table 23 Cluster 2 (basic questions)*

Question	N	Decryption
Opinion of the environment (friends, parents, etc.)	0,8316	Consumers depend on the opinions of others
Advertising on the street, at points of sale, etc. offline advertising	0,8947	Offline advertising is quite an influencing factor when choosing organic
Promotions and discounts on goods	1	Discounts and promotions play a big role for consumers
Product price (profitability of purchase)	0	Price doesn't play any role for consumers
Advertising on the Internet (including blogs)	1	Advertising on the Internet plays big role
Availability of live experience (product reviews)	0,5684	Reviews on the Internet are not important for consumers

Gender	0,5474	To a greater extent, female consumers are in this cluster
age_18-24	0,6947	Most of the consumers are aged 18-24
age_25-35	0,3053	A smaller part of consumers aged 25-35 years

Source: compiled by the author

As can be seen from Table 23, most of the consumers of this cluster are female, however, the survey was translated in favor of women (which should be taken into account here), so we can assume that this cluster is equal in gender. Figure 21 shows a diagram that shows what most affects the representatives of the cluster when buying organic goods. The biggest influence is played by promotions and discounts on good and online advertising. The smallest influence factor is the price.

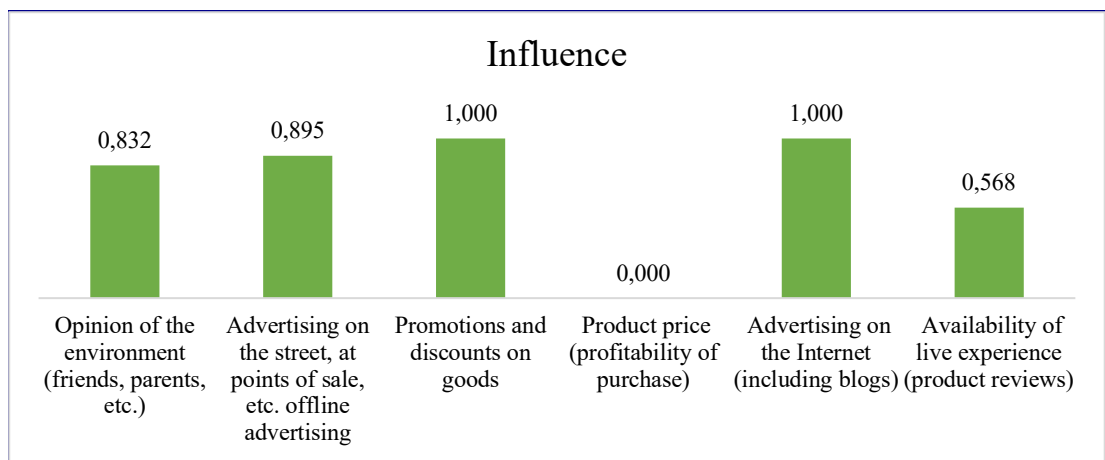


Figure 21 Influence on Cluster 2

Source: compiled by the author

Table 24 presents coefficients that reflect the behavior of consumers of organic products of this cluster. The table shows that this cluster often buys organic goods, and buys plenty of categories, since the coefficient is 0.937 (when encoding data 1 – several categories, 0 – one). However, the average monthly receipt for this cluster is low, and they buy an average amount of organic products. It can be assumed that these are essential goods – food products.

Table 24 Cluster 2 (behavior)

Question	N	Decryption
How often do you buy organic products?	1	This cluster buy organic products very often
How much is your average MONTHLY receipt approximately?	0,2	The average check for the month is not high
How many products do you buy on average per month?	0,4947	This cluster buys an average amount of organic products
What organic products do you buy most often?	0,9368	This cluster buys many different categories of organic

Source: compiled by the author

If we compare «How often do you buy organic products?» of the first and second clusters, we can see that the second cluster buys organic products almost 3 times more often, as can be seen from Figure 22.

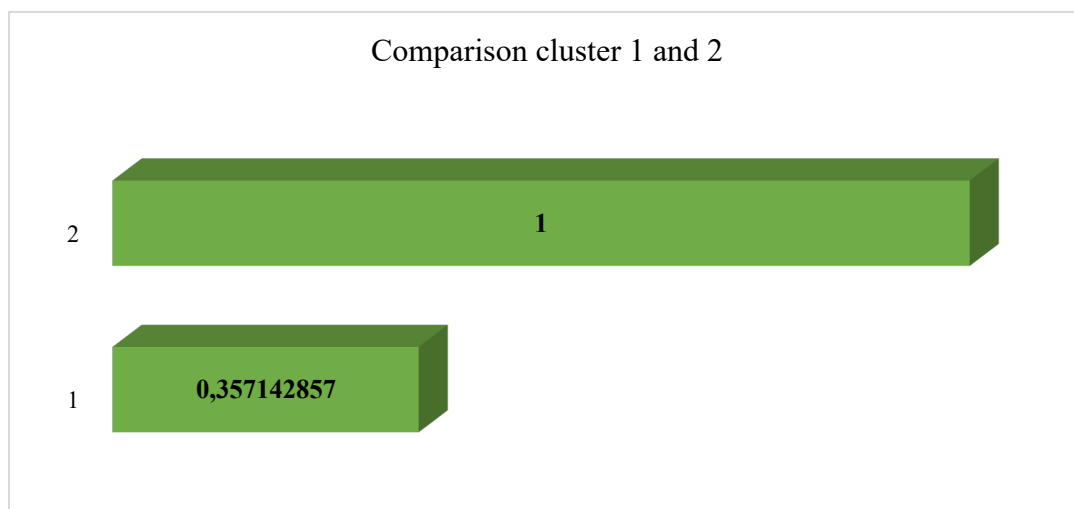


Figure 22 Comparison of cluster 1 and 2

Source: compiled by the author

As can be seen from Table 25, unpopular factors are taste and certificate warranty. The next most unpopular factors are availability in stores, safety and non-GMO.

Table 25 Cluster 2 (factors)

Question	N	Decryption
Health benefits	0,895	The health care factor plays a big role
Environmental impact	0,884	The factor of caring for the environment plays a big role
Animal welfare	0,811	The factor of caring for animals plays a big role
Organic production	0,863	Factor organic production plays a big role
Nutritional Value	0,874	The nutritional value factor plays a big role
Non-GMOS	0,705	The non-GMO factor is quite important
Safety	0,611	The factor of product safety is quite important for this cluster
Quality (composition)	0,737	The quality factor plays a big role
Certified Warranty	0,358	The certification factor is not important
Taste	0,274	The taste factor is not important
Freshness	0,811	The freshness factor of products is important
Availability in stores	0,558	The availability factor in quite important

Source: compiled by the author

The remaining factors are popular for this cluster, which can also be seen from Figure 23. Among this cluster of consumers, more organic factors are the most popular, from which it can be

concluded that these are experienced organic consumers who consciously consume organic products.

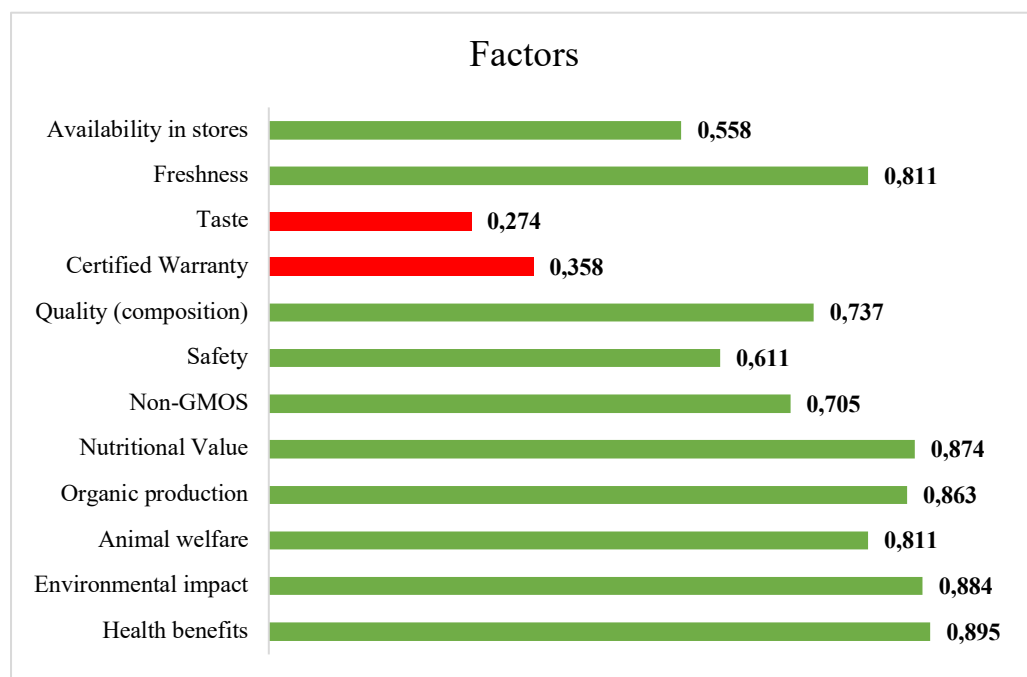


Figure 23 Factors for Cluster 2

Source: compiled by the author

The next step will be to analyze the reasons for the start of consumption of organic products after the pandemic, which is presented below in table 26.

Table 26 Cluster 2 (reasons)

Question	N	Decryption
I started buying organic products because I started taking care of my health	0,5105	This cluster may started organic consumption due to health concerns
I started buying organic products because I am concerned about environmental issues	0,2316	This cluster has not started organic consumption due to concern for the environment
I started buying organic products to try something new	0,6526	This cluster may have started consuming organic matter to try something new
I started buying organic products because it's a trend now	0,5158	This cluster has not started organic consumption due to fashion
I started buying organic products because they taste better	0,5474	This cluster may have started consuming organics because of the better taste

Source: compiled by the author

Based on this table, it is difficult to name an unambiguous reason, however, the reason for this cluster is «I started buying organic products to try something new», then there are reasons related to health care (0.51), better taste (0.55) and trend (0.51). Environmental problems did not play a role in the beginning of the consumption of organic products for this cluster.



Table 27 Cluster 2 (additional questions)

Question	N	Decryption
I always feel more organic (feeling healthy) when I buy organic products	0,6	This cluster quite like the feeling of organic
Specify where you most often buy organic products?	0,3368	This cluster does not use plenty of sales channels. Mostly they use only one
Are you subscribed to pages/blogs/organic products companies?	0,6947	This cluster monitors the organics in social networks
I would like to have more educational content on social networks about organic production/products	1	This cluster strongly wants more educational content in social networks
I can confidently call my lifestyle active	0,6211	This cluster can be called relatively with an active lifestyle

Source: compiled by the author

From Table 27, it can be concluded that representatives of this cluster have feelings of involvement in organic products (coefficient 0.6). Most often they use one sales channel (when encoding data 1 – several channels, 0 – one, in this case the coefficient is 0.34). Most representatives of this cluster tend to subscribe to organic blogs and social media pages (0.7), in addition, they want more educational content on the Internet. The lifestyle of this cluster can be called moderate.

Based on all the data presented above, this cluster can be characterized as organic activists. They often consume organic products, factors that are related to the main goals of organic production are important for them.

#### Cluster 3: Online Pedants

The following is a description of the third cluster. As can be seen from Table 28, the vast majority of consumers of this cluster are people aged 18-24 years. The biggest influence when choosing organic products on them is product price, advertising on the Internet and product reviews (all coefficients of these indicators are greater than 0.9). Opinion of the environment, offline advertising and promotions/discounts do not play a big role for this cluster. The coefficients of these factors vary from 0.4 to 0.5.

Table 28 Cluster 3 (basic questions)

Question	N	Decryption
Opinion of the environment (friends, parents, etc.)	0,4577	Consumers don't depend on the opinions of others
Advertising on the street, at points of sale, etc. offline advertising	0,4155	Offline advertising doesn't influence factor when choosing organic
Promotions and discounts on goods	0,4155	Discounts and promotions don't play role for consumers
Product price (profitability of purchase)	0,9366	Price plays a big role for consumers
Advertising on the Internet (including blogs)	0,9296	Advertising on the Internet plays big role
Availability of live experience (product reviews)	0,9296	Reviews on the Internet are very important for consumers
Gender	0,5634	To a greater extent, female consumers are in this cluster
age_18-24	0,7254	Most of the consumers are aged 18-24
age_25-35	0,2746	A smaller part of consumers aged 25-35 years

Source: compiled by the author

As can be seen from Table 29, this cluster often buys organic products (coefficient 1, with data encoding 1 is the frequency of purchases from 10 times a month), but at the same time the average check for the month is low (coefficient only 0.28). In addition, they tend to buy an average amount of organic products (0.67), but at the same time from different product categories (coefficient 0.82, with data encoding 1 – 2 or more categories, 0 – one category).

Table 29 Cluster 3 (behavior)

Question	N	Decryption
How often do you buy organic products?	1	This cluster buy organic products very often
How much is your average MONTHLY receipt approximately?	0,2817	The average check for the month is not high
How many products do you buy on average per month?	0,662	This cluster buys an average amount of organic products
What organic products do you buy most often?	0,8239	This cluster buys many different categories of organic

Source: compiled by the author

If we talk about the factors that are presented in Table 30, then in general, this cluster is characterized by almost the same factors that were described in the first and second clusters.

The most popular factors for this cluster. As you can see, the most popular factors for them are nutritional value (0.82), health benefit (0.81). The next most popular factors are organic production (0.796), animal welfare (0.78), quality (0.76), freshness and environmental

impact (0.75) and non-GMOS. Availability in stores (0.56), safety (0.47), taste (0.29) and certified warranty (0.28) are not significant factors for this cluster.

Table 30 Cluster 3 (factors)

Question	N	Decryption
Health benefits	0,8099	The health care factor plays a big role
Environmental impact	0,7535	The factor of caring for the environment plays a big role
Animal welfare	0,7746	The factor of caring for animals plays a big role
Organic production	0,7958	Factor organic production plays a big role
Nutritional Value	0,8169	The nutritional value factor plays a big role
Non-GMOS	0,7042	The non-GMO factor is quite important
Safety	0,4718	The factor of product safety is not important for this cluster
Quality (composition)	0,7606	The quality factor plays a role
Certified Warranty	0,2746	The certification factor is not important
Taste	0,2887	The taste factor is not important
Freshness	0,7535	The freshness factor of products is important
Availability in stores	0,5563	The availability factor in quite important

Source: compiled by the author

This can also be seen in the graphical interpretation of the data presented as a histogram in Figure 24.

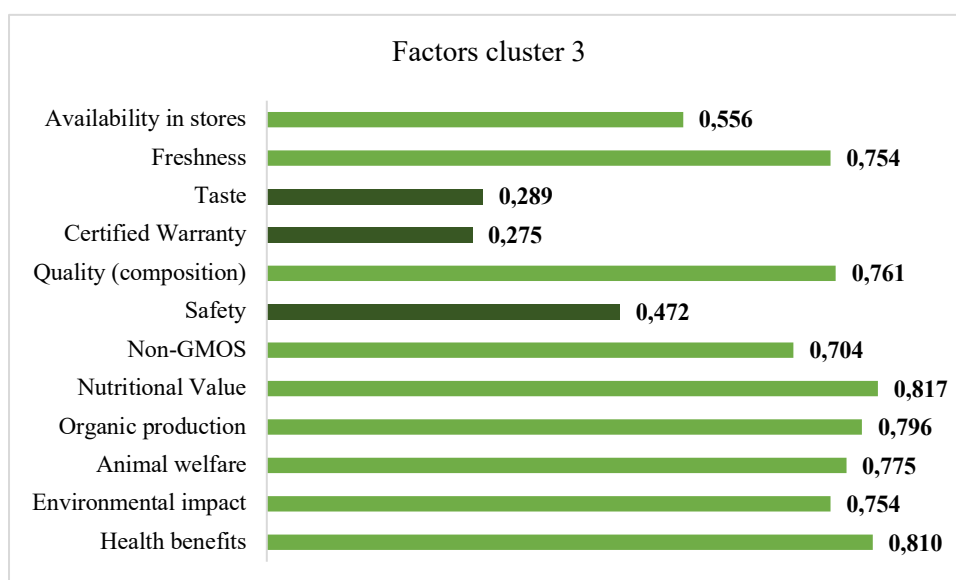


Figure 24 Factors for Cluster 3

Source: compiled by the author

From Table 31, conclusions can be drawn about the beginning of the consumption of the cluster of organic products after the COVID-19 pandemic. Most of the representatives of this

cluster started consumption in order to try something new (0.66), and this is also partly due to the fashion for organic consumption (0.60) and in connection with the expectation of good taste (0.52). Surprisingly, this cluster is absolutely not characterized by the transition to organic due to care and health (0.25) and due to environmental problems (0.23).

*Table 31 Cluster 3 (reasons)*

Question	N	Decryption
I started buying organic products because I started taking care of my health	0,2465	This cluster has not started organic consumption due to health concerns
I started buying organic products because I am concerned about environmental issues	0,2324	This cluster has not started organic consumption due to concern for the environment
I started buying organic products to try something new	0,6549	This cluster may have started consuming organic matter to try something new
I started buying organic products because it's a trend now	0,6014	This cluster may start organic consumption due to fashion
I started buying organic products because they taste better	0,5211	This cluster may have started consuming organics because of the better taste

*Source:* compiled by the author

The concluding questions in the block about this cluster are questions about promotion and sales channels. As can be seen from Table 32, it is not typical for this cluster to feel like an organic consumer. It is also important to note that presumably they use one sales channel (0.34, with data encoding 1 – several channels, 0 -one channel). Speaking of organic blog subscriptions, it's hard to say for sure.

*Table 32 Cluster 3 (additional questions)*

Question	N	Decryption
I always feel more organic (feeling healthy) when I buy organic products	0,6268	This cluster quietly like the feeling of organic
Specify where you most often buy organic products?	0,338	This cluster does not use plenty of sales channels. Mostly they use only one
Are you subscribed to pages/blogs/organic products companies?	0,6901	This cluster monitors the organics in social networks
I would like to have more educational content on social networks about organic production/products	0,8099	This cluster wants more educational content in social networks
I can confidently call my lifestyle active	0,6479	This cluster can be called relatively with an active lifestyle

*Source:* compiled by the author

The coefficient 0.69 indicates that the vast majority of this cluster follow the development of organic blogs, which provide information on the production and consumption of organic matter, as well as discuss issues of environmental change on the planet. In addition to everything, you can

notice a high coefficient about educational content in social networks (0.81). After analyzing this cluster, it can be concluded that they tend to consume more online: when choosing organic products, they pay attention to advertising on the Internet and necessarily read reviews, as well as pay attention to the price of the product. They also often consume organics and consume a large number of different product categories. The reason for the consumption of organic products after COVID-19 for them was the desire for a new, the expectation of a better taste and the trend of organic products. The name of this cluster is: online pedants.

#### Cluster 4: Offline pedants

The interpretation of the results of the last cluster is presented below. Table 33 contains the main characteristics of this cluster. It can be noted that the most important factors influencing this cluster are the opinions of others, reviews, offline advertising and discounts. Interestingly, each of these factors is expressed in the maximum index – 1. This means that almost all representatives of this cluster have identified these factors. The average impact on this cluster is the price of organic products. Not important (not expressed at all, with a coefficient of 0) is online advertising.

*Table 33 Cluster 4 (basic questions)*

Question	N	Decryption
Opinion of the environment (friends, parents, etc.)	1	Consumers depend on the opinions of others
Advertising on the street, at points of sale, etc. offline advertising	1	Offline advertising influence factor when choosing organic
Promotions and discounts on goods	1	Discounts and promotions play a big role for consumers
Product price (profitability of purchase)	0,44048	Price doesn't play a big role for consumers
Advertising on the Internet (including blogs)	0	Advertising on the Internet doesn't play any role
Availability of live experience (product reviews)	1	Reviews on the Internet are very important for consumers
Gender	0,52381	To a greater extent, female consumers are in this cluster
age_18-24	0,70238	Most of the consumers are aged 18-24
age_25-35	0,29762	A smaller part of consumers aged 25-35 years

*Source:* compiled by the author

Speaking about the consumer experience of this cluster, let's turn to Table 34 As can be seen from the table, this cluster buys organic products often (coefficient 1), however, the average monthly receipt is relatively low, and they also buy an average amount of organic products per month (coefficient 0.63), while from various product categories (with a coefficient of 0.88, when encoding data 1 – 2 or more categories, 0 – one).

Table 34 Cluster 4 (behavior)

Question	N	Decryption
How often do you buy organic products?	1	This cluster buy organic products very often
How much is your average MONTHLY receipt approximately?	0,30952	The average check for the month is not high
How many products do you buy on average per month?	0,63095	This cluster buys an average amount of organic products
What organic products do you buy most often?	0,88095	This cluster buys many different categories of organic

Source: compiled by the author

Table 35 presents the factors that are most important for this cluster. There are three main groups of factors: important, average and unimportant. The important ones include organic production (0.92), nutritional value (0.92), quality (0.89), health benefit (0.89), as well as freshness, animal welfare and environmental impact. The average factors include non-GMOS (0.73) and safety (0.55). Unimportant factors for this cluster are availability in stores, taste and certified warranty.

Table 35 Cluster 4 (factors)

Question	N	Decryption
Health benefits	0,89286	The health care factor plays a big role
Environmental impact	0,83333	The factor of caring for the environment plays a big role
Animal welfare	0,84524	The factor of caring for animals plays a big role
Organic production	0,91667	Factor organic production plays a big role
Nutritional Value	0,91667	The nutritional value factor plays a big role
Non-GMOS	0,72619	The non-GMO factor is quite important
Safety	0,54762	The factor of product safety is quite important for this cluster
Quality (composition)	0,89286	The quality factor plays a role
Certified Warranty	0,2619	The certification factor is not important
Taste	0,22619	The taste factor is not important
Freshness	0,84524	The freshness factor of products is important
Availability in stores	0,36905	The availability factor in not important

Source: compiled by the author

A graphical interpretation of the factors is presented below in Figure 25.

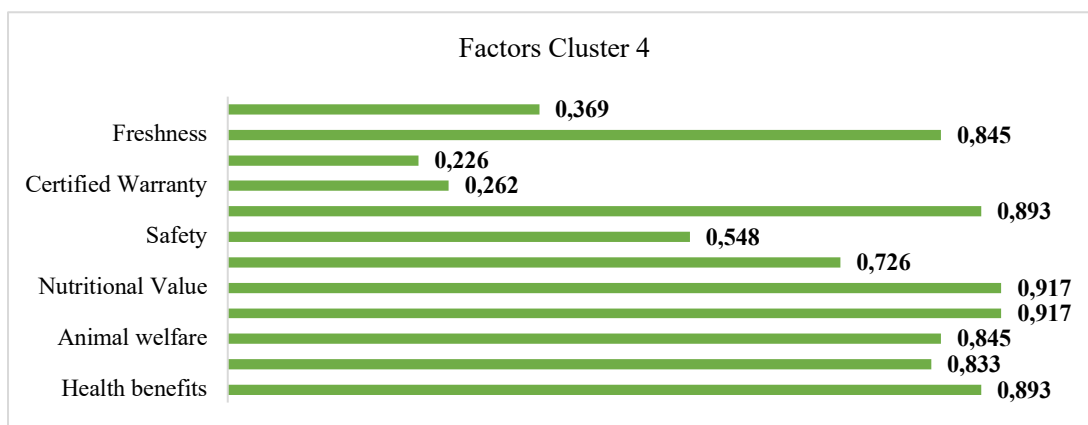


Figure 25 Factors for Cluster 4

Source: compiled by the author

Table 36 shows the reasons why the fourth cluster started consuming organic products after the COVID-19 pandemic. It can be noticed that the factor of trying something new is most pronounced, the expectation of a better taste is in second place, and then the fashion factor for organics. Again, it is surprising that the factor of health care and concern for the environment are not so important.

Table 36 Cluster 4 (reasons)

Question	N	Decryption
I started buying organic products because I started taking care of my health	0,22619	This cluster has not started organic consumption due to health concerns
I started buying organic products because I am concerned about environmental issues	0,29762	This cluster has not started organic consumption due to concern for the environment
I started buying organic products to try something new	0,72619	This cluster may have started consuming organic matter to try something new
I started buying organic products because it's a trend now	0,42857	This cluster hasn't started organic consumption due to fashion
I started buying organic products because they taste better	0,52381	This cluster may have started consuming organics because of the better taste

Source: compiled by the author

Speaking about the additional issues that are presented in Table 37, we can conclude that self-belonging to organics does not play a role for this cluster (coefficient 0.54). On average, they use one sales channel (coefficient 0.39) and it is not so typical for them to be subscribed to online blogs about organics, as indicated by a fairly low coefficient (0.39). And they are also not strongly involved in companies conducting educational content on their social networks (coefficient only 0.67). At the same time, among all clusters, they have the most active lifestyle, the coefficient of which is 0.9. Summing up, this cluster can be called offline pedants.

Table 37 Cluster 4 (additional questions)

Question	N	Decryption
I always feel more organic (feeling healthy) when I buy organic products	0,53571	This cluster quietly like the feeling of organic
Specify where you most often buy organic products?	0,39286	This cluster does not use plenty of sales channels. Mostly they use only one
Are you subscribed to pages/blogs/organic products companies?	0,39286	This cluster doesn't monitors the organics in social networks
I would like to have more educational content on social networks about organic production/products	0,66667	This cluster accept educational content in social networks
I can confidently call my lifestyle active	0,89286	This cluster can be called active

Source: compiled by the author

Thus, it turned out to analyze four clusters of organic products consumers after the COVID-19 pandemic, including connoisseurs, organic activists, online pedants and offline pedants. In Figure 26, you can replace the pie chart of the representatives of each cluster. As it can be seen, the offline pedants and online pedants cluster has the largest number of consumers aged 18-24 years.

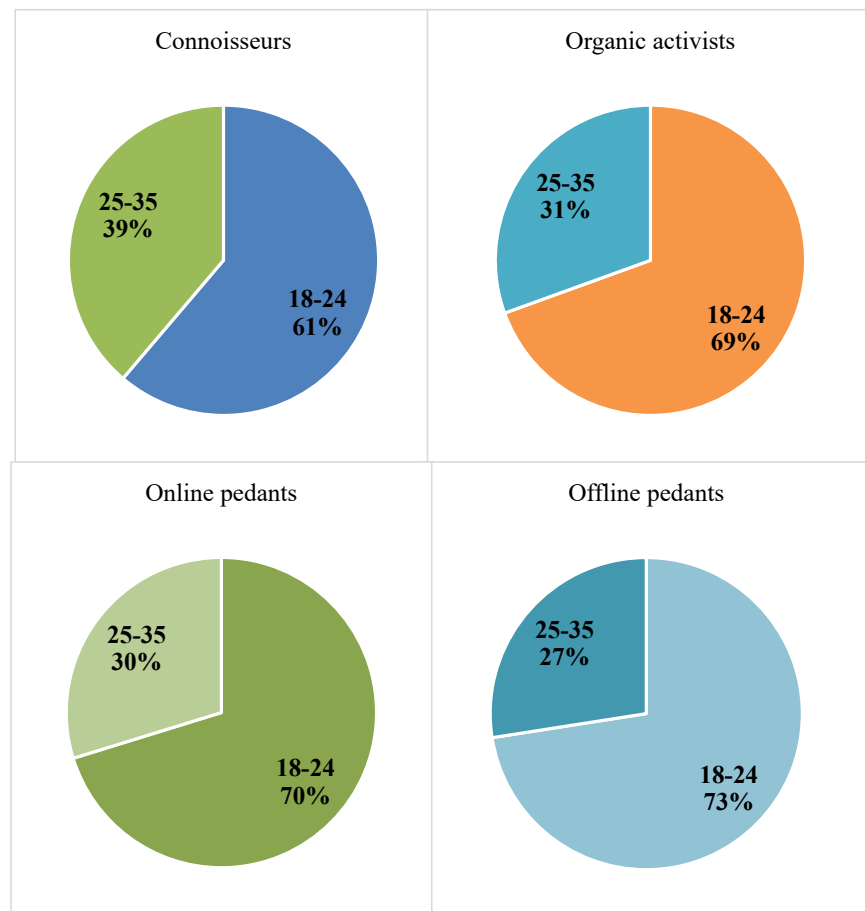


Figure 26 Description of the ages of each cluster

Source: compiled by the author



Figure 27 shows graphs that show what influences representatives of each class when choosing organic products after the coronavirus pandemic. As you can see, in this case, there are strong differences between clusters. These differences were described earlier in the description of each cluster.

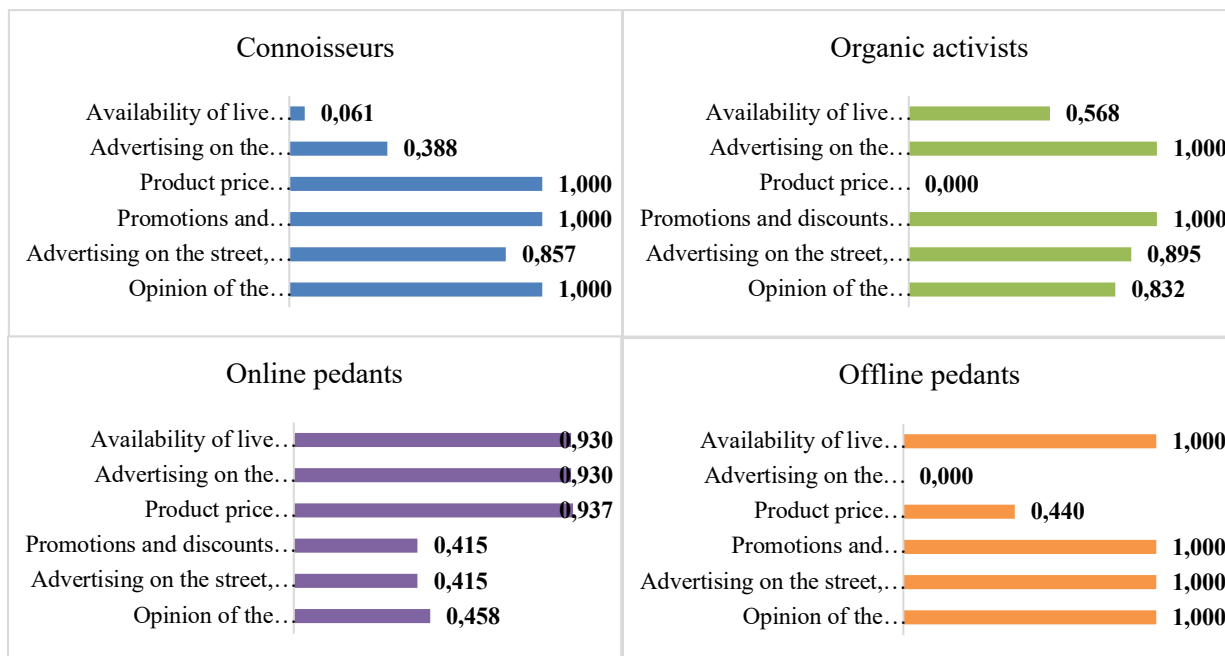


Figure 27 Description of the influence factors of each cluster

Source: compiled by the author

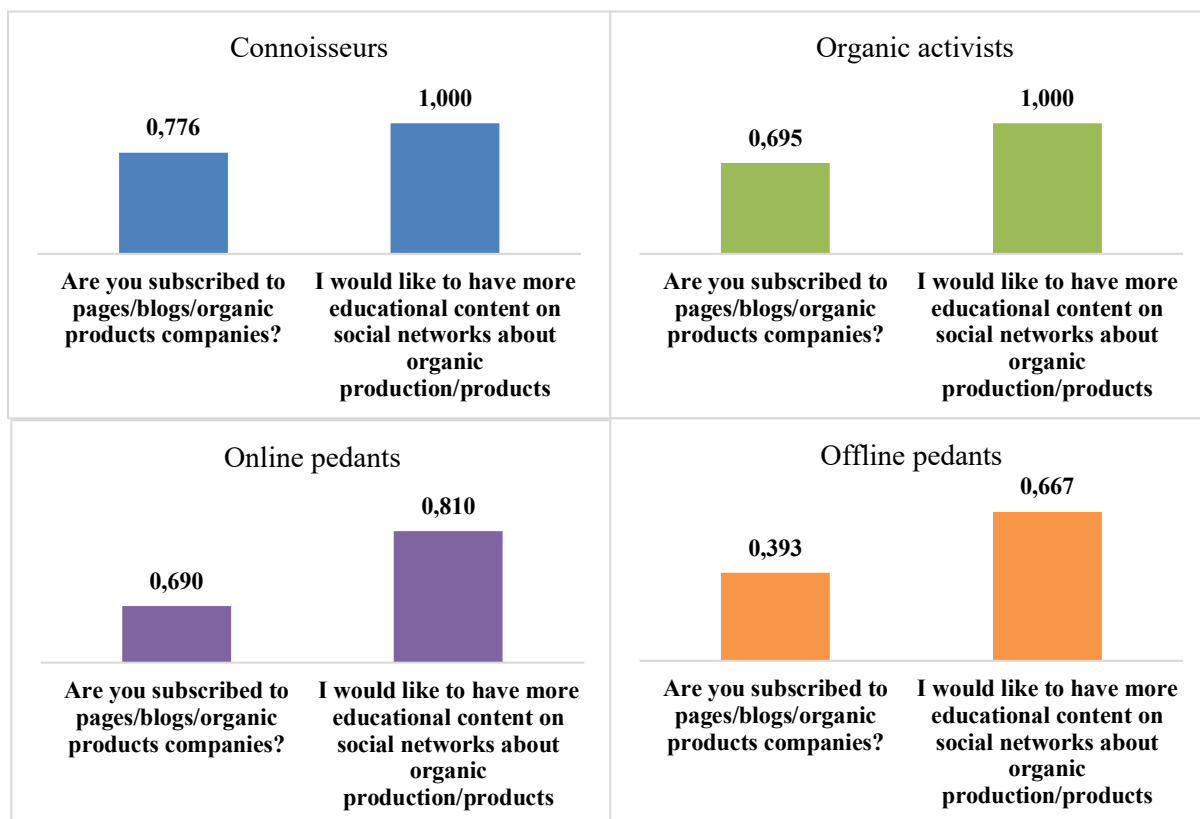


Figure 28 Description of the attitude towards social media's content

Source: compiled by the author

Speaking about cluster subscriptions to organic goods social networks and the attitude of representatives to educational content, we can refer to Figure 28. A detailed description of each of the coefficients is found in the analysis and description of each cluster.

## 2.2 Discussions and recommendations

Due to Mix Research, it turns out to answer the main research question of the study. Two studies were carried out: qualitative and quantitative. Qualitative research was conducted in the form of a focus group. In total, 3 focus groups were conducted, respondents were divided according to income: low (up to 30,000 rubles), middle (from 30,000 to 60,000) and above average (60,000). In total, 21 people took part in the focus group. As part of the analysis of the obtained qualitative data, content analysis of the first, second and third types was carried out. Next, a narrative analysis was carried out.

Limitations of the focus group:

1. During the focus group, there was a slight shift in the sample towards male respondents. This is due to the fact that 21 people took part in the focus group: 7 with low income, 7 with middle income and 7 with above-middle income. As a result, 10 women and 11 men were interviewed.
2. The sample included people from cities with a population of more than 100,000, with an active lifestyle and aged 18-35 years, as well as current consumers of organic products.

Now, we formulate 6 main positions and correlate them with the theses of the literature review (Table 38).

*Table 38. Analysis of the results of qualitative research*

№	LR	QR	Result
1	During the analysis of the literature, we found out that the consumption of organic products is influenced by different facts (they are considered in the works of many authors). However, the question remained about the impact of Covid 19 on consumer ability and preferences. We noted that the consumer's interest in more environmentally	Indeed, COVID-19 has played a big role in the consumption of organic products. If we compare the consumption of organic products before the pandemic and after, the respondents noted that they either started to consume (more or in general started), or they had more time to study the issue of consumption and production of organic products. as a	Illustrated

	friendly products has changed, but is this the case in our realities?	result, they drew conclusions and switched to organic.	
2	The study of the motives for the consumption of organic goods. it can be concluded that at the moment the consumption of organic products goes beyond the standard care of their health. Consumer behavior patterns are evolving from a "blind" purchase based on available information and an attractive price to a combination of product choice with lifestyle and attitude to the environment. That is why the need for a clear understanding of product labels, distinctive signs on packages, QR codes for the possibility of switching to the source of product information is becoming increasingly important.	Speaking about the motives of organic consumption, the respondents' opinions were divided, so this was further tested in a quantitative study. The majority of respondents noted that they switched to organic because they began to worry more about their health as a result of the pandemic (they were especially afraid of mortality statistics, so respondents began to monitor their health). Respondents also noted that they are concerned about the problem of the environment, the issue of animal protection, as well as the quality and taste of organic products. Also, some consumers claim that organic consumption is an opportunity to try something new.	Illustrated
3	The issue of choosing purchase channels is always relevant, the pandemic has made some changes in people's usual lives. Customers began to give more preference to online shopping, as it is safer, faster, and more choice. Therefore, we decided to confirm whether there is such a trend in organic consumption.	If we talk about sales channels, then those respondents who consumed organic products before the pandemic bought them in specialty stores and sometimes in markets. There was also already an experience of buying online, for example, in iHerb. However, after the pandemic, respondents noted that buying in regular stores (for example, X5 Retail Group). Therefore, consumers began to buy there more often.	Illustrated
4	Many studies have talked about the importance of income in choosing organic products, but there were also reverse positions. Modern economic conditions have allowed	The issue of the impact of the crisis on the ability to consume organic matter was also studied. The majority of respondents noted that they did not notice any significant changes in	Illustrated

	us to determine the impact of this factor in real time.	capabilities. However, if money does not allow you to buy organic products due to the high cost, then some are ready to abandon the consumption of organic products.	
5	During the analysis, we identified the factors and grouped them into 3 semantic groups according to the degree of influence.	It is worth adding that in the course of a qualitative study, out of all the factors studied in literature review, it was possible to identify a group of hard factors that most influence consumer choice. Among them: health benefits, environmental impact, animal welfare, production practices, nutritional value, absence of GMOS, safety, quality, certification warranty (EO logo), expectation of better taste, self-belonging to organic, freshness and accessibility in stores.	Supplemented the already existing concept
6	During the analysis of the literature, we noted a trend towards a marketing component. There was a question about the need for special channels and ways to inform, to increase knowledge among the population.	At the end of the focus group, the respondents' attitude to the promotion of organic products was studied. For most respondents, promotion plays a role, but not a primary one. It is important for them to have more sources through which they can learn information about organic products.	Not Illustrated

An online survey was conducted to conduct a quantitative study. According to calculations, the sample should have included at least 384 people. 627 people took part in the survey, but the data of 419 respondents were analyzed, since the rest did not pass the screener questions (age, experience of organic consumption, the city has more than 100,000 population). There was a total of 19 questions in the questionnaire.

Limitations of the Internet survey:

1. When analyzing the final sample, it was possible to notice that the majority of respondents were aged 18-24 years (288 respondents or 69%). Respondents aged 25-35 (181 respondents or 31%).

2. Since the method of sampling was chosen by the «snowball» method, which refers to the deterministic sampling method, this suggests from the very beginning that in the future several reservations may arise when forming the results and when distributing the questionnaire. If you look at this example of research, then it is worth considering the personal factor that guided the researcher.

Now, we formulate 7 main positions and correlate them with the theses of the literature review (Table 39).

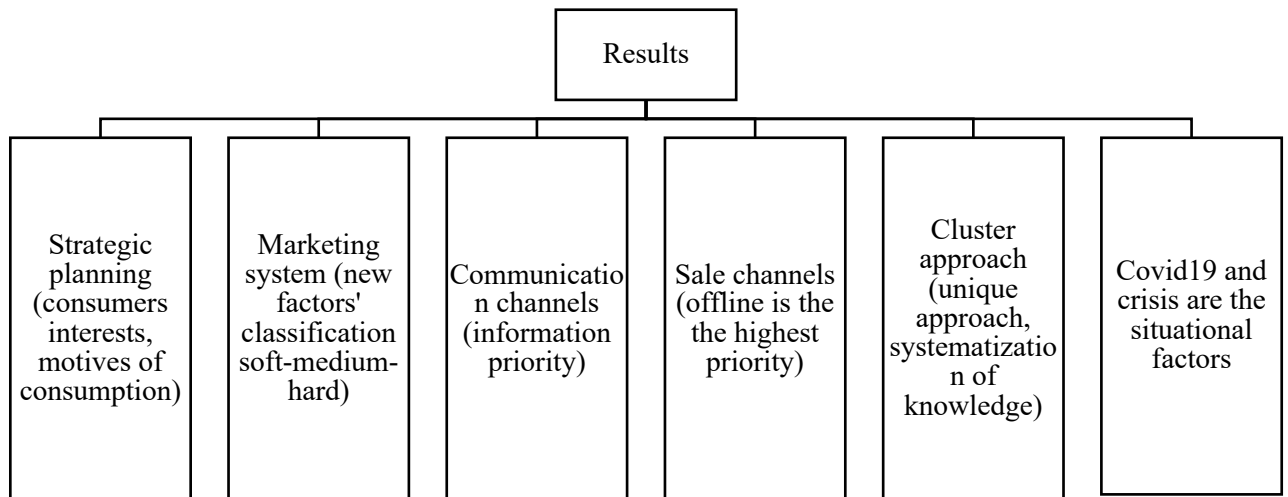
*Table 39. Analysis of the results of quantitative research*

№	LR	QR	Result
1	During the analysis of the literature, we found a trend towards generalization of the concept of "organic products". Despite this, organic products include various categories, so we decided to consider them in our survey.	With the help of graphical interpretation of the data, it turned out to rank organic products that are in the greatest and least demand among consumers. The most frequent categories: food products, cosmetics, beverages and alcohol. The most not popular: children's products, clothing/bags and home decor. Additionally, a graphical analysis of the products was carried out in accordance with the gender of the respondents. Both genders have the most popular categories: food products, cosmetics and beverage. The next most popular products for men are alcohol, clothing and vitamins. Among women, the following products: household chemicals, children's products and vitamins.	Supplemented the already existing concept
2	During the analysis of the literature, the following factors were identified: price, health and environmental friendliness.	Speaking about the factors that influence the choice of consumers, descriptive statistics were carried out. As the analysis showed, the biggest impact on consumers is the price of the product, in second place live reviews and discounts on products. The following are the opinions of others, and then online and offline advertising.	Confirmed partly
3	The age factor has not been studied a lot in the studies under study, but our survey has shed light on this issue.	During the analysis of variance, it was possible to identify the dependence that the greater the age of the consumer, the greater his receipt, the number of orders and the frequency of purchases of organic products.	New result
4	The issue of online shopping was touched upon in the	As a result of correlation and regression analysis, it was possible to identify the relationship	New result

	research papers, but it has not been sufficiently studied.	between the frequency of purchases of organic products and the ability to buy online. As a result, it turned out to develop the equation frequency of purchases (per month) = 16 times-1.3 times * the number of online orders.	
5	Grouped factors may be more concretized.	With the help of graphical interpretation of the data, it turned out to rank hard factors. The main factors of organic food consumption are health benefit, environmental impact and quality. This should be emphasized when developing the promotion of organic products. The most important factors for consumers are freshness, safety and accessibility in stores.	Confirmed
6	The issue of choosing purchase channels is always relevant, the pandemic has made some changes in people's usual lives. Customers began to give more preference to online shopping, as it is safer, faster, and more choice. Therefore, we decided to confirm whether there is such a trend in organic consumption.	As the graphical interpretation of the data showed, the majority of respondents buy organic products in regular stores, in second place among respondents are specialty stores, followed by marketplaces such as OZON, Wildberries and Lamoda. Specialized online stores are only in 4th place among respondents.	Supplemented the already existing concept
	During the analysis of the literature, we noted a trend towards a marketing component and importance of information. There was a question about the need for special channels and ways to inform, to increase knowledge among the population.	Descriptive statistics have shown that the majority of respondents receive information about organics through social networks, so it is important to continue developing this direction. In addition, respondents want there to be more educational content about organics.	Confirmed

## Recommendations

Taking into account the received and systematized information in the course of qualitative and quantitative research, we will formulate practical recommendations (Figure 29).



*Figure 29 Practical recommendations*

In addition to the formulated system of factors in the course of qualitative and quantitative research, we have prepared recommendations for already specific groups based on cluster analysis. Cluster analysis showed that there are 4 significant clusters (consumer groups) of organic products. When positioning and promoting organic products, it is now necessary to consider the characteristics of each of the clusters.

1. For consumers from the connoisseurs group, it is important to pay attention to the fact that they are more influenced by the opinions of others, offline advertising, discounts on organic products and the price of organic products. They are also willing to buy expensive organic products. When positioning, emphasis should be placed on such factors as health benefits, organic production, freshness of products and nutritional value. Naive advertising also can be done in Internet blogs for them, since the overwhelming number of these consumers subscribe to organic blogs on social networks. Also, when promoting organic products, educational content should be created.
2. As for the second cluster, organic activists, they are more influenced by advertising both online and offline, as well as the opinions of others and discounts. They very often buy organic products and at the same time different categories, but at the same time they do not

spend so much money on it, which should also be taken into account. In addition, when positioning organic products, emphasis should be placed on factors such as health benefits, the environment and animals, as well as organic production, nutritional value and freshness of products. It is not so important for them to be subscribed to the social networks of organic blogs or companies, but it is still important for them to have educational content on Internet sites where they can learn more about organic consumption.

3. Speaking about the 3rd group of consumers, online pedants, it is worth considering that they spend a lot of time in an online environment, so they are greatly influenced by online advertising, and they also read reviews of organic products and are guided by the price when buying. They often buy organic products, but their average check is not large enough. However, they tend to buy organic products from several product categories. When positioning products for this cluster, it is worth considering such factors as nutritional value, health benefit, organic production, animal welfare, quality, freshness, environmental impact and non-GMOS. At the same time, they do not always subscribe to the social networks of companies that produce organic products. As for the educational direction in the promotion, they are positive about it.
4. The last, the fourth cluster of offline pedants, is characterized by a greater life in an offline environment. They are most influenced by the opinions of others, offline advertising on the streets and at points of sale, discounts on products and live reviews. They buy organic products often, but their average monthly receipt is low. It is worth noting that they buy many different product categories. However, judging by the receipt, presumably these are inexpensive goods. When positioning, it is worth focusing on factors that are related to the organic characteristics of organic products. As the name of the cluster suggests, online is not such an important channel for them to receive information about organic products, so it is better for them to use alternative sources, for example, offline events.

For all clusters of consumers, it is important to note that most often they use one sales channel. As a quantitative study has shown, these are mostly offline stores, but the pandemic has given a boost to the spread of online trade in organic products, so companies should develop this direction further.



## Conclusion

The paper considers the system of factors for choosing organic products. Below we put the main conclusions of the research:

- Information accessibility. The coronavirus has had a significant impact on the choice of organic products. Although we attributed it to situational factors, food consumption has changed over this period. It is worth noting that the pandemic contributed to the change of habitual behavior of people. In our case, the fact of changes in spending free time is interesting: during the pandemic, people have become accustomed to reading more information about organic products on the Internet in various blogs and on manufacturers' websites, and therefore it is worth paying attention to the preparation of information materials to increase consumer loyalty. The creation of a consumer information system, not only covering the key aspects of the production and sale of organic products, but also understandable for the "ordinary" consumer may well be seen as an essential step in the development of the Russian market of organic products.
- Reviews. It is impossible not to mention the importance of reviews when choosing organic products. This factor is not so highly studied in the works reviewed, however, we found out that it plays almost a key role in choosing a product. At the same time, both reviews of the product and the manufacturer's company are important. This factor should also be taken into account when forming a strategy for promoting organic products.
- Insincerity. The main mistake brands make when planning eco-campaigns is insincerity. In an attempt to earn "social approval points," brands can launch initiatives they don't believe in and campaigns whose values they don't share. Marketing everywhere is becoming more honest and transparent - this is a forced measure in the digital age. And in the organic category, transparency and openness are especially important.
- The pandemic has contributed to the consumption of organic products. Most respondents admitted that they started consuming organic products during the pandemic. At the same time, respondents began to actively engage in sports and devote more time to it.
- 1.0. Hard, medium and soft factors. The various studies reviewed in the literature review allowed us to identify the key factors of consumer behavior, which we grouped into hard factors (health benefits, environmental impact, animal welfare, production practices, nutritional value, availability, absence of GMOs and price),

medium factors (safety, quality, appearance, origin, certification warranty (EU logo) and expectation of better taste) and soft factors (freshness and more natural appearance). In a qualitative study, it is important to check already existing factors, as well as supplement the study with new factors.

- 2.0. Hard, medium and soft factors. As a result of qualitative research, a new classification of factors was formulated: hard middle and soft, Table 12.
- Hypotheses and RQ. During the qualitative and quantitative analysis, 18 questions and were put forward, which were discussed in detail in Chapter 2.
- In the quantitative study, only hard factors were considered and based on these factors, 4 clusters of consumers (connoisseurs' group, organic activists, online pedants, offline pedants) with characteristic features were formed. Also, we gave some recommendations for each cluster.

Thus, the paper conducted a critical analysis of the scientific literature, which allowed us to identify trends, patterns and factors of choice of organic products, which formed the basis of qualitative and quantitative analysis. Also, the paper presents the results of a focus group and an online survey of respondents. Cluster analysis in this paper is the basis for the specific recommendations. We conclude that most of the hypotheses from the literature analysis are confirmed: about the impact of the price, about the impact of the pandemic, about the presence of various factors. We have confirmed the value - motive of buying organic products: they belong to healthy, environmentally friendly goods. The price affects the purchase of goods, but it is not a priority. Taking care of health is a priority motive for buying products. This factor is directly related to the concept of promotion and communication of goods. Thanks to our research, new ideas were formulated:

- was identified the relationship between the frequency of purchases of organic products and the ability to buy online. As a result, it turned out to develop the equation frequency of purchases (per month) = 16 times-1.3 times \* the number of online orders;
- was identified the dependence that the greater the age of the consumer, the greater his receipt, the number of orders and the frequency of purchases of organic products;
- was carried out in accordance with the gender of the respondents. Both genders have the most popular categories: food products, cosmetics and beverage. The next most popular products for men are alcohol, clothing and vitamins. Among women, the following products: household chemicals, children's products and vitamins;

- was identified a group of hard factors that most influence consumer choice. Among them: health benefits, environmental impact, animal welfare, production practices, nutritional value, absence of GMOS, safety, quality, certification warranty (EO logo), expectation of better taste, self-belonging to organic, freshness and accessibility in stores;
- the majority of respondents buy organic products in regular stores, in second place among respondents are specialty stores, followed by marketplaces such as OZON, Wildberries and Lamoda. Specialized online stores are only in 4th place among respondents.

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### Appendix 1. The description of the focus-groups respondents

Respondents with low income (up to 30,000 rubles):

1. Respondent 1. Daria, 25 years old. Lives in Yaroslavl. She is a author of scientific works in the field of philology. She spends her leisure time reading, watching movies or walking. Leads a relatively active lifestyle. The pandemic has not had a significant change in lifestyle. As for the consumption of organic products, Daria has been a consumer for more than 5 years with a periodic frequency of purchases (several times a month). Before buying, she studies the available information on the Internet. Most often buys food (such as milk, cottage cheese, cheese), cosmetics (creams, tonics and serums for the face) and hair products (shampoos, masks, balms). Daria's main motive for consuming organic products is «The desire to reduce the amount of harmful additives consumed in food, used on skin, nails, hair». When buying, pay attention to the markings (certification) and composition. Mainly purchases goods on marketplaces like Ozon, Wildberries, Yandex Market. From offline points, she named the store Vkusville.
2. Respondent 2. Arina, 23 years old. Lives in St. Petersburg. She is studying for a master's degree at St. Petersburg University of Economics in the 1st year in the specialty Project Management. She does not work, her main income is a scholarship, she lives with her parents. In her free time, she reads and watches TV shows, as well as seeing friends. Sometimes she does sports. She believes that her leads an active lifestyle. According to Arina, the pandemic has made her more lazy: «I began to leave the house less, she began to order groceries, clothes, care and cosmetics online». She started ordering organic products during the pandemic on the Internet. She used iHerb for this. Mainly buys skin and hair care, vitamins, creams, lotions, tonics, shampoos, blush, eye shadow. She can buy dairy products (cheese, milk) at offline points of sale. Sometimes she orders organic coffee. She orders cosmetics and care when there is a need for it («Well, I buy cosmetics right away when it ends»), and she only buy organic food when she sees it in the store. Arina buys organic products because she likes the composition, and also likes how she feels when she consumes organic. When choosing organics, she reads the composition and reviews (reviews most influence her choice). She also named the store Golden Apple as offline stores. In addition, Arina named companies that produce organic cosmetics (Ecooking, Organic Kitchen)

3. Respondent 3. Anastasia, 23 years old. Lives in St. Petersburg. Works at the airport as a medical service specialist. She calls her lifestyle active. In her free time, she meets with friends, reads books, listens to music and does sports. According to Anastasia, COVID-19 did not affect her lifestyle. When exactly Anastasia started consuming organic products, she does not remember, but claims that she has been buying organic for a long time. The main motive for the consumption of organic products is utility. In addition, Anastasia is actively engaged in sports and the consumption of organic products «helps to control and lose weight. » She buys organic products often («I buy every 2-3 days»), most often she buys organic vegetables, for example, cucumbers and tomatoes, which are included in her daily diet. She also buys avocados, greens and eggs. When buying, pay attention to the price, quality and availability. However, Anastasia does not study the information about the product before buying and chooses immediately in the store. From the shops where she buys organic products, Anastasia highlighted Vkusville.
4. Respondent 4. Andrey, 18 years old. Lives in Kaliningrad. Andrey is a student and studying journalism at the Baltic Federal University. In his free time, he likes to draw, watch documentaries and read books. Leads a moderately active lifestyle. At the time of COVID-19, I began to eat more dietary and balanced foods, as well as devote himself to sports every morning («When quarantine began, I ate a lot of junk food. When I decided to put my diet in order, I started cooking and organic products are great for this»). Andrey tries to buy organic products every day, because he cares about the quality and freshness of products. Most often he buys in specialized stores or orders online (dairy products - more often, rarely - household chemicals). Andrey chooses organic products because of its usefulness, and he also believes that such products are more delicious and high-quality - healthier.
5. Respondent 5. Andrey, 26 years old. Lives in Nizhny Novgorod. Works as a salesman in a sporting goods store. Leads an active lifestyle. He is engaged in sports, the champion of Russia in fencing in juniors. However, Andrey noticed that due to the pandemic, he began to spend more time at home and take more care of his health, which influenced his desire to eat organic goods. On average, he buys organic food once a week when he collects a grocery basket for a week. If he sees an unfamiliar product, he reads about it on the Internet. First of all, he pays attention to the price of the goods. Most often makes purchases in Vkusville. Advertising does not affect his choice about the product. In addition, Andrey noted that

«Because of the crisis, it has become harder to buy, due to the rise in price of products».

6. Respondent 6. Mikhail, 20 years old. Lives in St. Petersburg. He is studying at the Pedagogical University as a teacher of history and social studies. Work as a tutor and tests websites. Leads an active lifestyle. In his free time, he likes to go to the countryside and generally travel around Russia, go to exhibitions and meet friends. Because of the pandemic, started doing more sports: doing exercises. Mikhail walks more than 10.000 steps every day. He started buying organics when he moved out from my parents and started earning money on my own. And the opening of Vkusville at home influenced the frequent consumption of organic matter. Usually Mikhail goes to the store once a week and buys for a long time, but sometimes he can buy something during the week. Most often buys food and dishwashing detergents. For Mikhail, the main motivation is a conscious attitude to his health. When buying, pay attention to the place of production, shelf life, composition. Before the pandemic, Mikhail liked organic ice cream.
7. Respondent 7. Albina, 23 years old. Lives in St. Petersburg. She is a student of the Military Medical Academy S.M. Kirov. Leads an active lifestyle. In her free time, she likes to read books, walk in the park and meet friends. After the pandemic, Albina began to walk more outdoors and monitor her diet. She has been a consumer of organic products for more than a year, because «the pandemic has shown that a lot depends on the diet in our lives, including the state of health. » She buys organic products about once a week if she finds something unusual. Most often these are food products. When buying, she pays attention to the composition of the products, does not check the information in advance, but does it already in the store. Albina would like to have more educational information about organics on the Internet.

The income of respondents in the focus group ranges from 30,000 to 60,000 rubles:

1. Respondent 1. Dmitry, 25 years old. Lives in St. Petersburg. Works as a sales manager. In his free time, he likes to shoot and taste alcoholic beverages. He calls his lifestyle moderately active. According to Dmitry, the pandemic did not give significant changes in his life. «What used to be remote computer work, what is now. » He likes the taste, but he is not satisfied with the price. Most often, Dmitry buys frozen organic products: dumplings (with tomato and parmesan), khinkali, but he buys them «on a case-by-case basis, mainly when I find myself near the appropriate store and there is a desire to try something new or liked earlier.» When

buying organic food, Dmitry pays attention to the packaging, composition and cost of products. When choosing a product, Dmitry does not read information about an organic product in advance, but he is attracted by «interestingly conceived advertising campaigns». For him, the most important thing is that organic food is delicious. He singled out Vkusville from the stores.

2. Respondent 2. Ivan, 24 years old. Lives in St. Petersburg. He is studying at ITMO for a master's degree in the 2nd year in the specialty Digital Humanities. He is a volunteer in an organization that deals with separate garbage collection. Combines work with study. He works at the ITMO Center for Digital Humanities Research as an engineer. Leads an active lifestyle: goes in for sports, walks with friends, plays computer, likes to travel. According to Ivan, before the pandemic, he was more active: «Now he began to leave the house less often, he began to do the usual things from home more often. For example, ordering food, doing sports at home, working and studying from home. Some kind of lazy has become.» He became interested in organic products before the pandemic (a friend introduced him to organic products), but during COVID-19 he began to learn more about organic production and began to buy organic more often. Buys organic about once a week. «I try to buy as often as I can. Unfortunately, I can't find what I need in all stores.» Most often buys fruits and vegetables (once a week), as well as dairy products (cheese, cottage cheese, milk). In the wardrobe there are clothes made of organic cotton and a bag made of organic leather. The main motive for the consumption of organic products: concern for the environment. When buying, pay attention to the composition of the product, the composition of the packaging, the manufacturer. «It happens that the product is organic in composition and production, but the packaging is made of plastic, which is not accepted for processing. I don't want to take this at all.» From the stores called iHerb. Reads blogs about organics. An example was given by the blog Organikablog.
3. Respondent 3. Margarita, 24 years old. Lives in Moscow. Works as an administrator in a gym. She leads an active lifestyle: she does sports in the gym, devotes a lot of time to herself. The lifestyle of COVID-19 has not changed, of the changes she named only the consequences of the disease «tastes and smells disappeared for 6 months. » She uses organic products all her life, because «it is useful and plays an important role in the life of any person. » Usually Margarita buys organic products 2-3 times a week, trying to buy in reserve for a few days in advance. Mainly buys fruits, vegetables, dairy products. The main motive for organic consumption is a

- healthy lifestyle. When buying organic products, she pays attention to the manufacturer, but she will not find out about the product on the Internet in advance.
4. Respondent 4. Arseniy, 29 years old. Lives in St. Petersburg. Works in the volunteer center as an event organizer. Leads an active lifestyle. In his free time, he likes to go to the swimming pool. Because of COVID-19, began to use online services more (ordering groceries, buying clothes, paying bills). He began to consume organics around the time of the pandemic, as he began to care about the issue of health and was frightened by the statistics of mortality from COVID-19. He buys organic products once a week. Most often these are food products (vegetables, fruits, yoghurts, kefir, milk, cheese). Rarely buys organic alcohol (wine). Arseniy pays attention to the price, packaging and composition when buying goods. However, if «a product with a super composition, but is very expensive, I will not buy it. There are goods with a good composition and at an affordable price. » When choosing a product, he reads information about it on the Internet, if there is a need for it («If, for example, I'm going to Pyaterochka or Lenta, then I'll read there, because you can accidentally buy anything there»)
  5. Respondent 5. Daria, 33 years old. Lives in Moscow. Works as an art critic. Leads a moderately active lifestyle. In her free time, he likes to read. The pandemic, according to Daria, has not changed her life. Basically, Daria buys only organic fruits and vegetables, but only when there is such an opportunity (the store is nearby, for example). More often buys household chemicals (as it runs out) because it contains fewer chemicals. Daria claims that she started consuming organic products because of her interest in something new, because organic was not so popular before. Before the pandemic, she Daria bought cosmetics in Lush, but due to the crisis in consequence of the pandemic, she switched to more budget brands and less organic.
  6. Respondent 6. Alina, 22 years old. Lives in St. Petersburg. She studies journalism at RANEPА and earns a part-time job on the radio. Leads an active lifestyle. In her free time, she does yoga and self-development. Thanks to COVID-19, she began to pay more attention to her health: going to yoga, eating a balanced diet, and therefore began to consume organics during COVID. Before, she only bought various organic jams and peanut pastes. Now, on average, she buys once a week. Most often buys vegetables (cucumbers and tomatoes), bread, jams, pasta, oils and cosmetics (skin care). First of all, when buying, she pays attention to the price and composition, and also checks reviews on the Internet and the availability of certificates. During

COVID, she learned that «non-organic food often contains harmful hormones and pesticides» so she switched to more organic food. Most often, she buys organic products on OZON or Vkusville, and can also go to specialty stores.

7. Respondent 7. Mikhail, 27 years old. Lives in St. Petersburg. Works as a librarian. Leads an active lifestyle: likes to read, travel, runs during the warm period of time. He has been using organic products since childhood. «I like it when the product is what nature intended it to be, when it does not change artificially, but remains real. » He does not buy organic products every day, only in cases when there is money that he is ready to spend on it. Most often buys food, household chemicals and cosmetics (care). The main motivators for Mikhail are naturalness and safety. When choosing a product, pay attention to the composition, historical brand and external characteristics, as well as reviews on the Internet. Mikhail claims that thanks to COVID-19, organics has become more popular and affordable.

The respondents' income level is from 60,000 rubles and above.

1. Respondent 1. Artemiy, 24 years old. Lives in St. Petersburg. Works as a sales manager. In his free time, he likes to relax, watch TV shows and do design. Leads a moderate active lifestyle. Artemiy believes that he has not noticed significant changes since the beginning of the pandemic. He started consuming organic products even before the pandemic «I have been a consumer of products for a long time» and buys it every day. These are mainly food products (vegetables). Artemia is motivated by health concerns to consume organic food. When buying, pay attention to the composition. Before buying organic products, carefully examines the sources on the Internet to learn more about the manufacturer and about the methods of production.
2. Respondent 2. Alexandra, 29 years old. Lives in St. Petersburg. She works as a specialist in the educational department of an educational institution. She leads an active lifestyle: she plays sports, likes to cook, walk and listen to music. The pandemic played a role in Alexandra's consumption of organic products. Alexandra got acquainted with organic products 2 years ago during the COVID-19 epidemic and started eating them «because they do not contain chemicals and have great health benefits. » She tries to buy organic several times a week, most often buys cheeses, vegetables and fruits, less often buys milk and meat. As a motivation to buy organic, Alexandra highlights the good quality of products and its useful properties. To obtain additional knowledge about organic uses Internet sources.

3. Respondent 3. Vladimir, 25 years old. Lives in St. Petersburg. The main source of income is training in the management of sailing yachts. He leads an active lifestyle, likes to go out into nature, snowboard in winter. The most important change due to the pandemic was the closure of borders, on which his earnings depend. Consumes organic matter «to the same extent as ordinary». Vladimir rather chooses «not a specific product, but a store. And the frequency of purchases at the organic food store depends on my travel route. On average, this is 2 visits to such a store per month. » Most often, Vladimir buys dairy products, vegetables, berries, nuts, eggs, frozen semi-finished products and organic vodka. Vladimir believes that the main motives for organic consumption are the increased usefulness of organic products, taste and high price. Pays attention to the appearance of organic products. If Vladimir goes to the store, he does not study the product information in advance, because «he has never encountered such a need. » Vladimir noted that the pandemic contributed to the spread of organic food deliveries («I did not see for myself the connection between covid and organics, except for the growing popularity of food deliveries. And in my case, my organic store began to deliver products during the pandemic, and this is a plus»).
4. Respondent 4. Anatoly, 34 years old. Lives in St. Petersburg. Military. He leads an active lifestyle, loves fishing and is interested in politics. After the start of the pandemic, Anatoly noted a decrease in communication with friends. Anatoly has been consuming organic goods for a long time, but he thought they were just farm products. He started using organic products to improve his quality of life and health. Anatoly buys organic products when he finds organic products in the store. Anatoly also notes the high prices for organic products. Most often, Anatoly buys food products that he orders on the VkusDostavka website. It is important to note that Anatoly trusts the information on the product packaging, so he does not additionally read the information on the Internet. Anatoly also added that he would like to have «one badge of distinction for all organic products, because now there are a lot of all kinds of badges, but it is possible that the product does not belong to organic»
5. Respondent 5. Elizabeth, 24 years old. Lives in Yekaterinburg. Elizaveta is an individual entrepreneur, provides copywriter services. Leads an active lifestyle: attends a gym, does Irish dancing. she also spends a lot of time on education and self-development. The pandemic has had a significant impact on Elizabeth. She started spending more time at home, working from home. From the point of view

of everyday life, all purchases have switched to an online format. The pandemic played a significant role for Elizabeth for organic consumption: «During self-isolation, I was looking for delicious and healthy food for myself to save time on cooking, so I tested different companies. Just at this time, environmental issues became more concerned, so I decided to give more preference to organic. » As for the frequency of purchases, Elizabeth buys organic every other day, because she likes to consume fresh food («It seems to me that if it is a natural product, it cannot have the possibility of long-term storage»). Most often, Elizabeth buys food, less often (once a month) household chemicals. Elizabeth pays more attention to the composition of the organic product, the price and the manufacturing company. She trusts only familiar companies.

6. Respondent 6. Anna, 33 years old. Lives in Moscow. She is a manager by education but has mastered web design and has been creating design for companies for 7 years. Also work as an English tutor. Leads a moderately active lifestyle. In her free time, she likes to draw. During the pandemic, Anna noticed that life had become slower: Anna began to travel less, and Anna also became interested in environmental issues. However, in general, Anna has been using organics for a long time, because she monitors her nutrition especially after the birth of her daughter. In addition, during COVID Anna began to learn more about organic clothing production («But, of course, during the pandemic, I even started looking towards eco-clothing. And as for the question of whether I have learned more about them – I think so»). Anna always pays attention to the composition of food and cosmetics, as well as the packaging, the volume of the product, the price. She buys food (dairy products, bread, vegetables, fruits) once a week, cosmetics once a month (face or body creams, shampoos). Anna also noted that I buy household chemicals in Vkusville. As motivation, Anna noted her own health and the health of her family, as well as various environmental issues.
7. Respondent 7. Alexey, 27 years old. Lives in St. Petersburg. Works as an Internet promotion manager. He leads an active lifestyle: he likes to ride a bike, collect legos and play board games. Because of the pandemic, he began to worry more about my health. He started using organic products 4 years ago, «to minimize the harm from living in a big city, I believe that this will help me stay healthy longer. » He usually buys organic products 2-3 times a month in trusted stores, because he believes that «real organic products are very rare. » Most often buys fruits, vegetables, olive oil,



wine, household chemicals. When buying, pay attention to certificates of conformity and markings. He read the product information on the internet to avoid greenwashing. Alexey also claims that the pandemic gave him time to read more about organic products and analyze many sources on this issue. Usually buys organic products in supermarkets and markets.

## **Appendix 2. Focus-group scenario**

Good afternoon, my name is Mary, I am a graduate student of GSOM St. Petersburg State University. I chose you as respondents for the focus group because you are consumers of organic products. The purpose of this focus group is to study the impact of Covid-19 pandemic on the factors of consumption of organic products. All received information will be used exclusively for writing a master's thesis. It is worth outlining the basic rules and regulations of the focus group. I ask you to switch the phone to silent mode. I will ask you questions, I ask everyone to actively participate in the conversation, to answer honestly. There are no «right» and «wrong» answers here. Let's respect each other, so I ask you not to interrupt the answers of other participants. Everything you say is confidential. For the purpose of further analysis of the discussion, a video recording of the conversation is being conducted. This record cannot be transferred to third parties without your consent and will be used for internal use.

### **Block: General questions:**

1. Introduce yourself. What is your name and how old are you?
2. Tell us what you do and enjoy in life? What city do you live in?
3. Describe your lifestyle. Do you think there have been any changes in your lifestyle since the COVID-19 pandemic?

### **Block: research questions (Factors)**

1. How long have you been a consumer of organic products? Why did you decide to consume organic?
2. How often do you buy organic products?
3. Which organic products do you buy most often, which less often?
4. What usually motivates you to buy organic products?
5. What do you notice when buying organic products?
6. Will you read about the product in advance before buying, or do you choose the product on the spot? If you do, what sources do you use?
7. Please follow the link that was sent to you in the chat. You need to find your name. Here are the main factors that influence consumers when choosing organic products. Divide these factors into 3 groups: hard, medium and soft.
8. Are there any factors you would like to add? If so, which column? Are there factors that seem unimportant to you?

### **(COVID-19)**

1. We have already talked about how your life has changed since the beginning of COVID-19. Please tell me, has COVID-19 affected your attitude to organic products? Have you learned more about organic products since the pandemic?

2. Tell us more, did you buy organic products before COVID-19? If so, which ones?
3. Can you share where you bought organic products before COVID-19? Where are you buying now? Can you say that the pandemic has made organic products more accessible?
4. Please follow the new link that was sent to you in the chat. Now categorize those same factors into the same three groups but try to relate it to your pre-COVID-19 life. Are there any factors that seem unimportant to you? Maybe you want to add something?

**(Promotion)**

1. Do you think promotion (advertising) of organic products influences your choice to buy organic product? If not, what is the effect?
2. Do you think certification influences your choice? Should the seller emphasize that his products are certified?
3. Should a manufacturing company take on an educational role and share knowledge about organic products with customers? If they should, in what form?

**Block: final questions**

1. Do you think the pandemic has affected your desire to be a consumer of organic products?
2. Do you think the crisis has affected your desire to be a consumer of organic products?
3. Would you like to add something to what we haven't talked about today?

**Block: conclusion and acknowledgements**

Thank you so much for taking part in the focus group. Tell me, was it interesting to you? Maybe you liked/disliked something? I will be very glad to feedback.

### Appendix 3. Content analyses of the focus-groups type 1-3

#### Appendix 3.1. Content analyses of the focus-groups type 1 (low income)

Respondent, age	Life changes due to COVID-19	Reasons for organic consumption	The beginning of organic consumption	Distribution channels BEFORE and AFTER the pandemic	The effects of the crisis on the ability to buy organic	The role of promotion for respondents	Product categories
Daria, 25	No	Health	5 years (before the COVID-19)	BEFORE: Ozon, Wildberries, Yandex Market AFTER: VkusVill	No	Advertising arouses interest, but does not affect the choice, but companies should educate consumers	Food, cosmetics (care and decorative)
Arina, 23	Online shopping, more time at home	Feeling of organic, the quality and composition are better	2-3 years ago (starts from COVID-19)	BEFORE: no AFTER: Ozon, Gold Apple, iHerb	No	Advertising from bloggers inspires confidence, but companies must educate consumers	Cosmetics, vitamins, oil.
Anastasia, 23	No	Health	She doesn't remember, but for a long time	BEFORE: VkusVill AFTER: VkusVill	No	Price, quality and availability are affected. Companies must educate consumers	Food
Andrey, 18	Healthier lifestyle (sport, nutritious food)	Health	2-3 years ago (starts from COVID-19)	BEFORE: no AFTER: online shopping, markets, special organic shops	No	Advertising does not affect, since, but companies should educate consumers	Food, household chemicals
Andrey, 26	Spent more time at home	Health	1 year (after COVID-19)	BEFORE: VkusVill AFTER: VkusVill	Because of the crisis, it became harder to buy because of the rise in price	No, price is more important than promotion, but companies should educate consumers	Food, candles
Mikhail, 20	More active and healthier life: everyday doing sport	Health	2 years ago (after he moved from parents)	BEFORE: VkusVill, supermarkets AFTER: VkusVill, supermarkets	No	Advertising does not affect, the composition and price affect. And also companies should educate consumers	Food, household chemicals
Albina, 23	More time outdoors,	Health	1 year (after COVID-19)	BEFORE: no AFTER: online shopping	No	No, but companies should educate consumers	Food

	healthier lifestyle (sport, nutritious food)						
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Source: compiled by the author

Appendix 3.2. Content analyses of the focus-groups type 1 (middle income)

Respondent, age	Life changes due to COVID-19	Reasons for organic consumption	The beginning of organic consumption	Distribution channels BEFORE and AFTER the pandemic	The effects of the crisis on the ability to buy organic	The role of promotion for respondents	Product categories
Dmitriy, 25	No	Taste	1 year ago ((after COVID-19)	BEFORE: VkusVill AFTER: VkusVill	No	Advertising is the only thing that affects the choice of goods. Moreover, companies should educate consumers as an advertising campaign	Food
Ivan, 24	Healthier lifestyle (sport, nutritious food), online shopping	Health, environmental issues	4 years ago (before COVID-19)	BEFORE: special shops, iHerb, supermarkets AFTER: special shops, iHerb, supermarkets, online shops	No, but products have become more expensive, but his income has become more	Advertising – no, the main thing is quality. Moreover, companies should educate consumers as part of an advertising campaign	Food, household chemical, clothes
Margaret, 24	No	Health	Since childhood (before COVID-19)	BEFORE: markets AFTER: supermarkets, markets	No	Advertising plays a role. Moreover, companies should educate consumers as part of an advertising campaign	Food
Daria, 23	No	Try something new	She doesn't remember, but for a long time	BEFORE: LUSH AFTER: LUSH, online shopping	No	No, but companies should educate consumers	Household chemical, cosmetics
Arseniy, 29	Online shopping	Health	2-3 years ago (starts from COVID-19)	BEFORE: VkusVill AFTER: VkusVill, online shopping, X5Retail Group	Yes, because cost of the products has increased	Advertising on social networks. Moreover, companies should educate consumers as part of an advertising campaign	Food, alcohol
Alina, 22	Healthier lifestyle (sport,	Health, environmental issues	2-3 years ago (starts from COVID-19)	BEFORE: supermarkets, OZON	No	Advertising – no, the main thing is quality. Moreover, companies should educate consumers as part of an advertising campaign	Food, oil, cosmetics

	nutritious food)			AFTER: OZON, supermarkets, special shops, online shopping			
Mikhail, 27	The world has been closed	Taste and organic origin	Since childhood (before COVID-19)	BEFORE: markets AFTER: markets, supermarkets, VkusVill	Yes, because cost of the products has increased	Reviews are more influenced, advertising is just to learn about the product. Moreover, companies should educate consumers as an advertising campaign	Food, household chemical, cosmetics

Source: compiled by the author

### Appendix 3.3. Content analyses of the focus-groups type 1 (above middle)

Respondent, age	Life changes due to COVID-19	Reasons for organic consumption	The beginning of organic consumption	Distribution channels BEFORE and AFTER the pandemic	The effects of the crisis on the ability to buy organic	The role of promotion for respondents	Product categories
Artemiy, 24	No	Health	He doesn't remember, but for a long time	BEFORE: supermarkets AFTER: supermarkets, online	No	Advertising plays a role. Moreover, companies should educate consumers as part of an advertising campaign	Food
Aleksandra, 29	Healthier lifestyle (sport, nutritious food)	Health and organic origin	1.5-2 years ago (starts from COVID-19)	BEFORE: no AFTER: special shops	Yes, because cost of the products has increased, and income has decreased	Advertising plays a role. Moreover, companies should educate consumers as part of an advertising campaign	Food
Vladimir, 25	Problems with work (international relationships)	Health, organic origin, taste	He doesn't remember, but for a long time	BEFORE: X5Retail Group AFTER: online services, X5Retail Group	No	Advertising plays a role. Moreover, companies should educate consumers as part of an advertising campaign	Food, alcohol
Anatoly, 34	Feeling of loneliness	Health	He doesn't remember, but for a long time	BEFORE: special shops AFTER: special shops and online shopping	Yes, because cost of the products has increased, and income has decreased	Advertising plays a role. Moreover, companies should educate consumers as part of an advertising campaign	Food
Elizabeth, 24	More time at home, online shopping	Health, environmental issues	2-3 years ago (starts from COVID-19)	BEFORE: supermarkets, VkusVill AFTER: markets, supermarkets, special shops, online services, VkusVill	Yes, because cost of the products has increased	Advertising plays a role. Moreover, companies should educate consumers as part of an advertising campaign	Food, household chemical

Anna, 33	Slow lifestyle	Health, environmental issues	2-3 years ago (starts from COVID-19)	BEFORE: markets, supermarkets, iHerb AFTER: markets, supermarkets, special shops, OZON, online services	No	Advertising plays a role. Moreover, companies should educate consumers as part of an advertising campaign	Food, household chemical, cosmetics
Alexey, 27	Thinking more about the health	Health, environmental issues	4 years ago (before COVID-19)	BEFORE: supermarkets, markets AFTER: supermarkets, markets	Yes, because cost of the products has increased	No, but companies should educate consumers	Food, household chemical, spices

*Source:* compiled by the author

## Appendix 4. The online survey questionnaire

Screening questions block:

1. Specify your gender:
  - Female
  - Male
2. Specify your age:
  - Under 18 years old (*out of the survey!*)
  - 18-24 years old
  - 25-35 years old
  - Over 36 years old (*out of the survey!*)
3. Have you bought organic products at least once?
  - Yes
  - No (*out of the survey!*)
4. Specify the type of place where you live:
  - A million-strong city
  - A large city (from 500 thousand to 1 million people)
  - A small city (from 100 to 500 thousand people)
  - A small town (less than 100 thousand people) (*out of the survey!*)
  - Not a city (village, etc.) (*out of the survey!*)

The main part block:

5. How often do you buy organic products? Specify the NUMBER – how many times a MONTH approximately (WITHOUT «times», etc.)  
Answer: \_\_\_\_\_
6. How much is your average MONTHLY check approximately? Specify the number (WITHOUT «R.», «rub», etc.)  
Answer: \_\_\_\_\_
7. How many products do you buy on average per month? Specify the number (WITHOUT «pcs.», etc.)  
Answer: \_\_\_\_\_
8. What category of products do you buy most often?
  - Food products (including oils, spices, food additives)
  - Alcohol
  - Cosmetics (decorative/care)
  - Household chemicals
  - Clothing/Bags



- Vitamins and dietary supplements
- Home Decor
- Other: \_\_\_\_\_

9. Evaluate the factors influencing your choice when BUYING organic products, where 1 is unimportant, 10 is important, 99 is difficult to answer.

Table 1. Online survey

	1	2	3	4	5	6	7	8	9	10	99
Health benefits											
Environmental impact											
Animal welfare											
Production practices											
Nutritional value											
Absence of GMOs											
Safety											
Quality											
Certification warranty (EU logo)											
Expectation of better taste											
Freshness											
Accessibility in stores											

Source: compiled by the author

10. Are you subscribed to pages/blogs/organic products companies?

- Yes
- No

11. Which of the following statements do you lean more towards?

Table 2. Online survey

	1	2	3	4	5	6	7	8	9	10	
I would not like to have more educational content on social networks about organic production/products											I would like to have more educational content on social networks about organic production/products

Source: compiled by the author

12. Indicate to what extent you agree with these statements, from «definitely disagree» to «definitely agree».

Table 3. Online survey

	Definitely disagree	In general, I disagree	Partly disagree	I partly agree	In general, I agree	Definitely agree
I get information about organic products from						

social medias (educational pages, blogs)						
I get information about organic products from organic companies						

Source: compiled by the author

13. Who or what influences you more in the process of CHOOSING organic products?

Rank in descending order of the importance of the factor, where 1 is the MOST important factor.

Table 4. Online survey

	1	2	3	4	5	6
Opinion of the environment (friends, parents, etc.)						
Advertising on the street, at points of sale, etc. offline advertising						
Promotions and discounts on goods						
Product price (profitability of purchase)						
Advertising on the Internet (including blogs)						
Availability of live experience (product reviews)						

Source: compiled by the author

14. Which of the following statements do you lean more towards?

Table 5. Online survey

don't feel more «organic» (feeling healthy) when I buy organic products										0	feel more «organic» (feeling healthy) when I buy organic products
---	--	--	--	--	--	--	--	--	--	---	---

Source: compiled by the author

15. Specify where you most often buy organic products?

- Regular stores (grocery, cosmetics, clothing stores, etc.)
- Specialty stores
- Ozon, Wildberries, Lamoda, etc.

- Specialized online stores
- Markets
- Other: \_\_\_\_\_

16. How many times do you order online per month? (If you haven't had, type 0)

Answer: \_\_\_\_\_

Socio-demographic block:

17. Which of the following statements do you lean more towards?

Table 6. Online survey

can't call my lifest yle active at all											0	can call my lifest yle active at all
--	--	--	--	--	--	--	--	--	--	--	---	--

Source: compiled by the author

18. Specify your type of employment:

- I work for hire
- I work for myself (self-employed)
- Student
- I study and work
- I don't study and I don't work
- Housewife

19. How do you assess your current financial situation?

- Almost all the money goes to pay for priority expenses (food, housing, transport, clothing, etc.)
- Most of my income goes to cover basic expenses, but there is a small margin
- Almost half of my income goes to basic expenses, and I can freely dispose of the remaining funds
- I spend a small part of my income on the payment of basic payments, and most of it I can freely dispose of
- I do not experience any financial difficulties – I have enough funds for everything

**Appendix 5. Descriptive statistics of factors, which influence consumers in the process of choosing a product**

	Opinion of the environment (friends, parents, etc.)	Advertising on the street, at points of sale, etc. offline advertising	Promotions and discounts on goods	Product price (profitability of purchase)	Advertising on the Internet (including blogs)	Availability of live experience (product reviews)
Valid	419	419	419	419	419	419
Missed	0	0	0	0	0	0
Average	4,33	4,72	3,72	3,39	4,49	3,68
Median	5	5	4	1	5	4
Mode	5*	7	4	<b>1</b>	6	4
*There are several modal values. The smallest value is shown						

*Source:* compiled by the author

## Appendix 6. Descriptive statistics

Descriptive statistics									
	Age	N	Average	Standard deviation	Standard error	95% confidence interval		Min	Max
						Lower limit	Upper limit		
Average receipt	18-24	288	1287,51	1398,726	82,421	1125,28	1449,74	150	10000
	25-35	130	1640,58	1171,414	116,56	1409,43	1871,94	100	6000
	Total	418	1404,97	1457,556	70,706	1324,68	1602,65	100	10000
Frequency of purchases of organic products per month	18-24	289	9,68	12,998	0,765	8,18	11,19	1	100
	25-35	131	15,45	21,217	2,111	11,26	19,63	1	150
	Total	418	11,2	15,709	0,804	10,19	13,35	1	150
Number of purchases per month	18-24	289	2,37	1,386	0,82	2,21	2,53	1	15
	25-35	131	2,82	1,92	0,191	2,44	3,2	1	15
	Total	418	2,483	1,55	0,077	2,38	2,69	1	15

*Source:* compiled by the author

**Appendix 7. Criterion of homogeneity of variances**

Criterion of homogeneity of variances					
		Levene's test	ct.cb.1	ct.cb.1	Prob>F
Average receipt	Based on the average	4,855	3	414	0,002
	Based on the median	3,337	3	414	0,019
	Based on the median and with adjusted df	3,337	3	325,96	0,02
	Based on the truncated mean	4,165	3	414	0,006
Frequency of purchases of organic products per month	Based on the average	6,901	3	415	0
	Based on the median	4,383	3	415	0,005
	Based on the median and with adjusted df	4,383	3	333,949	0,005
	Based on the truncated mean	5,344	3	415	0,001
Number of purchases per month	Based on the average	2,884	3	415	0,036
	Based on the median	2,923	3	415	0,034
	Based on the median and with adjusted df	2,923	3	378,644	0,034
	Based on the truncated mean	3,166	3	415	0,024

*Source:* compiled by the author

## Appendix 8. Multiple comparisons

Multiple comparisons							
Dependent variable	Age (I)	Age (J)	Average difference (I, J)	Standard error	Significance	95% confidence interval	
						Lower limit	Upper limit
Average receipt	18-24	25-35	-353,17	142,757	<b>0,082</b>	-732,4	26,05
	25-35	18-24	353,173	142,757	<b>0,082</b>	-26,05	732,4
Frequency of purchases of organic products per month	18-24	25-35	-5,764	2,245	<b>0,067</b>	-11,76	0,24
	25-35	18-24	5,764	2,245	<b>0,067</b>	-0,24	11,76
Number of purchases per month	18-24	25-35	-0,455	0,208	0,168	-1,01	0,1
	25-35	18-24	0,455	0,208	0,168	-0,1	1,01

*Source:* compiled by the author

**Appendix 9. Statistics (Hypothesis 4)**

Statistics			
		Frequency of purchases of organic products per month	Online order (times) per month
N	Valid	419	419
	Missed	0	0
Average		11,77	3,59
Standard error of the average value		0,804	0,111
Asymmetry		3,897	2,711
Standard Error of Asymmetry		0,199	0,199
Excess		20,323	11,365
Standard error of excess		0,238	0,238

*Source:* compiled by the author



### Appendix 10. Correlations (Hypothesis 4)

Correlations			
		Frequency of purchases of organic products per month	Online order (times) per month
How often do you buy organic products?	Pearson correlation	1	-0,136
	Significance		<b>0,005</b>
	N	419	419
How many times do you order online per month?	Pearson correlation	-0,136	1
	Significance	<b>0,005</b>	
	N	419	419

*Source:* compiled by the author

**Appendix 11. Statistics (Hypothesis 7)**

Statistics			
		I get information about organic products from social medias (educational pages, blogs)	I get information about organic products from organic companies
N	Valid	419	419
	Missed	0	0
Average		3,5442	3,1002
Mode		5	1

*Source:* compiled by the author